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INTERSTATE POLLUTION OF THE MISSOURI RIVER, OHAMA, NEBRASKA. SESSION (1st) HELD AT OMAHA, NEBRASKA ON JUNE 14, 1957

Public Health Service
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TRANSCRIPT OF CONFERENCE

on

INTERSTATE POLLUTION

of the

MISSOURI RIVER
OMAHA, NEBRASKA

OMAHA, NEBRASKA

First Session

14 June 1957

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CONFERENCE AT OMAHA, NEBRASKA
On Interstate Pollution
In the Missouri River

Room 302 City Hall
Omaha, Nebraska

June 14, 1957

Chairman: Mr. Murray Stein
Chief of the Enforcement Section
Water Pollution Control Program
U. S. Public Health Service
Washington 25, D. C.

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APPEARANCES

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Des Moines, Iowa

Mr. R. J. Schliekelman
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Des Moines, Iowa

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APPEARANCES (continued)

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Chief Engineer
Division of Health
Jefferson City, Missouri

Mr. Jack Smith
Engineer in Charge
Water Pollution Control Program
Jefferson City, Missouri

Kansas:

Mr. Carl Hodgkinson
Water Pollution Control Program
State Board of Health
Topeka, Kansas

City of Omaha:

Mayor John Rosenblatt;
Mr. Herbert Ulrich, Sanitation Engineer;
Mr. E. W. Woodbridge, City Engineer;
Mr. D. P. DeBord, Acting City Engineer;
Mr. Charles Durham, Consulting Engineer.

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CHAIRMAN STEIN: At this time I should like to open this Conference on Pollution of Interstate Waters of the Missouri River involving Nebraska, Iowa, Missouri, and Kansas, with particular emphasis on discharges in and around the Omaha, Nebraska, area.

This conference is held under the Federal Water Pollution Control Act and, in accordance with the terms of that Act, was called by the Surgeon General of the Public Health Service.

The purpose of a conference of this type is to bring states, other interested parties, and the Public Health Service together to lay a basis for future action by all parties concerned and to give states and localities an opportunity to take any remedial action which may be indicated under state and local law.

The Surgeon General, in accordance with the provisions of the Federal Act, has notified the official state agencies, and that is the State Department of Health of Nebraska, the State Board of Health of Kansas, the Division of Health of the Missouri Department of Public Health and Welfare, and the State Department of Health of Iowa. All of these state water pollution control agencies have representatives at this conference, and under the law this is a conference between the official state agencies and the Public Health Service. The official state agencies, of course, are privileged to bring whomever they desire to the conference.

At this conference Nebraska is represented by Mr. Filipi, and he has invited Mayor Rosenblatt of Omaha and other municipal and allied officials.

Iowa is represented by Mr. Houser and by Mr. Schliekelman.

Missouri is represented by Mr. Happy and Mr. Smith.

Kansas is represented by Mr. Hodgkinson.

The Public Health Service is represented by Mr.

Hopkins, the Regional Engineer with headquarters in Kansas City, and Mr. Dworsky, the Assistant Regional Engineer.

My name is Murray Stein and I am from Public Health Service headquarters in Washington.

In interstate pollution problems both the Federal Government and the states have responsibilities. However, I would like to emphasize this point. The Federal law clearly states, and it has always been the policy of the Public Health Service to recognize, that the states have the primary right and responsibility for taking action to abate and correct interstate pollution. The function of the Public Health Service is to encourage the states in these activities. However, the Public Health Service also is required by law to exercise certain responsibilities in connection with interstate pollution control problems.

The law provides that pollution of interstate waters which endangers the health or welfare of persons in a state other than that in which the discharge originates is subject to abatement, and when the Surgeon General believes that such pollution is occurring he is to call a conference of this type. That has, as I have indicated, already been done.

I should like to emphasize that we realize that in many areas there has been considerable progress made toward a solution of pollution problems by the states and by the local political subdivisions. Under the law we are required

to call this conference, among other reasons, just to set up a clear record indicating what progress had been done and what needs to be done to correct an interstate pollution problem.

Under the Act the Surgeon General is required at the conclusion of the conference to prepare a summary of the conference, which will be sent to all the conferees in attendance. The summary, according to law, must include the following:

(1) Occurrence of pollution of interstate waters subject to abatement under the Federal Act;

(2) Adequacy of measures taken toward abatement of the pollution; and

(3) Nature of delays, if any, being encountered in abating the pollution.

It is suggested that the conference be directed toward discussion of these points so that we may prepare a serviceable summary at its conclusion. In addition, the Surgeon General is required to determine at the conclusion of the conference whether effective progress toward abatement of pollution is being made. I think as an aid in such a determination it would be desirable for the conference to come up with a time schedule of remedial action.

I should like to call attention to Miss Hough, who is making a stenographic report of these proceedings for the

purpose of aiding us in preparing the summary and also providing a record of what is said and done here.

In addition I should like to outline what will generally be the proceedings of a conference of this kind. We should like to call on the conferees and the people designated by the conferees, such as municipal officials, to make statements on various aspects of this problem. When such statements are completed all conferees have a chance to comment on these statements or ask questions, and I think in that way we will find that we can probably develop this problem and perhaps seek some equitable solutions of the problem.

At this point I should like to call upon Mr. Glen Hopkins of the Public Health Service, who will give a general presentation of the interstate pollution problem of this area.

Mr. Hopkins.

MR. HOPKINS: Mr. Chairman, Mr. Mayor, gentlemen.

The Missouri River Basin, built around one of the longest rivers in the whole United States, has now in progress a vast water and land resources development program. Control of water pollution is an important and critical part of this development program. The value of the basin's water resources not only depends upon having the water available where it is needed, when it is needed, but also on its degree of cleanliness. The key to complete realization of the basin's potential depends upon the ability of its people to control water

pollution. Clean waters will protect advances already achieved and open a wide field of resources that are virtually untouched.

In the river stretch from Yankton, South Dakota, to St. Louis, Missouri, some 1,800,000 people use the Missouri River as a source of drinking water. Each day 250 million gallons of Missouri River water are used in the homes of these people. With population growth, problems of water supply and pollution control increase.

Recreational opportunities become increasingly important with population growth. Development of recreational facilities for campers, fishermen, boaters, and sightseers can be accomplished since the Missouri has become a controlled river. Realization of these values, however, depends upon pollution being controlled.

Because of the interstate nature of the Missouri River numerous studies and reports have been made over an extended period by the states and the Federal Government. Their purpose has been to point out the problem and prepare for remedial action.

The interstate effects of pollution in the Missouri River were identified as early as May, 1913, in a report, "Sewage Pollution of Interstate and International Waters--The Missouri River from Sioux City to Its Mouth," by Dr. Allan J. McLaughlin (Hygienic Laboratory - Bulletin No. 89). Through the years 1913 to 1948, the Lower Missouri remained of concern

to health officials of the states as well as the Federal Government.

In 1948, the Congress, cognizant of the health and welfare problems created by increasing pollution of the nation's waterways, established a cooperative pollution control program between state water pollution control agencies and the Public Health Service. Under this program the Public Health Service Regional Office VI, Kansas City, Missouri, and the five states in the Lower Missouri - South Dakota, Iowa, Nebraska, Kansas, and Missouri - cooperated in extensive investigations and reports of pollution conditions in the Missouri from the Niobrara River, South Dakota, to St. Louis, Missouri. A report, titled "Lower Missouri River Basin, Water Pollution Investigation, October 1952," outlined the pollution problem and suggested courses of action for cities, states, industries, and others to control this longstanding situation.

This report showed that untreated wastes were discharged to the river by Carter Lake and Council Bluffs, Iowa, and Blair, Bellevue, Nebraska City, Omaha, and Plattsmouth, Nebraska. Except for the Quaker Oats Chemical Company, major industries at Omaha, such as the Greater Omaha Packing Company and the South Omaha Packers, discharge wastes to the Missouri River through the Omaha municipal sewer system.

In July 1953 the Surgeon General of the Public Health Service, under authority of the Federal Water Pollution

Control Act, formally adopted a "Comprehensive Program For Control of Water Pollution - Missouri Drainage Basin" (P.H.S. Publication No. 317). The report, a joint effort of the ten basin states and the Public Health Service, noted the interstate nature of pollution along the main stem of the Missouri River and recommended treatment of wastes at Omaha, Nebraska, and other communities and industries discharging to the main stem.

Another report, "Evaluation of Interstate Pollution, Lower Missouri Sub-Basin, State of Nebraska," was prepared by the Public Health Service and approved by the state water pollution control agencies of Kansas, Iowa, and Missouri in August 1953. The purpose of this report was to provide a common basis of understanding between the states and Federal Government on factors relating to the pollution problem in the Lower Missouri River. Those responsible for discharging untreated wastes in the Omaha area were cited and the Nebraska Department of Health was asked by the Chief, Division of Water Pollution Control, Public Health Service, in a letter dated February 26, 1954, to take all possible action to secure abatement of pollution originating in Nebraska.

Following a series of meetings between the five states in the Lower Missouri Basin and the Public Health Service, a "Uniform State Program," outlining steps to abate interstate pollution, was adopted by the states in November 1953. Progress

reports have been periodically submitted to the Public Health Service since that time, the most recent of which indicates that the City of Omaha has levied a sewer service charge and the revenue is being used to finance a 3 million dollar bond program. An engineering firm has been retained to study sewage disposal problems at the 63rd and Harrison Streets plant, the Minne Lusa, Burt-Izzard, Grace and Chicago Streets outlets. By resolution of the Sanitation Commission, the South Omaha sewer outlets will also be under study in the near future.

While the pollution contributed by Omaha and the other cities, towns, and industries below it are of immediate concern, related pollution placed into the river from communities and industries above Omaha result in residual pollution immediately above Omaha. These sources of pollution, added to that coming from Omaha and below, constitute the total volume of pollution affecting the health and welfare of people in the Lower Missouri River. The related sources of pollution include wastes from Sioux City, Iowa, and South Sioux City, Dakota City, Niobrara, and Ponca, Nebraska.

Mr. Chairman, I would like to present a series of charts which will indicate some of the more important aspects of the pollution problem and show a number of findings of our several surveys.

This map outlines a few of the major projects of the

Missouri River Basin Development program which, together with the program for pollution control, forms the over-all plan aimed at conserving the basin's water resources. The flood control, hydroelectric power, irrigation, and navigation phases are aimed at helping the area and its inhabitants achieve greater economic security; to stabilize the economy against recurring drought and to stimulate the further development of the Basin to keep pace with national growth.

Outlined in blue is the navigation section of the river. Upstream from that on pear-shaped diagram is indicated the regulating reservoirs of the Missouri River. The black circles and segments of circles represent the sources of waste and their relative magnitude. The blue circles represent sources of public water supply.

Omaha has already felt the benefit of this program by being assured of freedom from floods on its extensive water-front area. Industrial growth of Omaha is one of the several consequences of this situation.

Chart No. 2. The four graphs on this chart show the average monthly density of coliform bacteria during the two-year period, 1955-56, at the municipal water intakes of Omaha, Nebraska, Council Bluffs, Iowa, St. Joseph, Missouri, and Kansas City, Kansas.

Coliform bacteria serve as indicators of pollution. The Public Health Service recommends that it not be in excess

of 5,000 per 100 milliliters and that not more than 5 percent of samples taken exceed 20,000 coliform bacteria per 100 milliliters in order to produce a healthful water supply using reasonable and economical treatment methods. While water treatment plants can, and do, treat waters containing greater quantities of coliform bacteria, the absence of disease should not create a false sense of safety about the quality of the Missouri River as a source of supply. Dependence must not be placed solely upon water treatment processes, and particularly chlorination, to produce a safe water supply from a highly polluted source. Human errors in operation, mechanical failures, or disaster conditions could result in serious illness by allowing polluted river water to break through the barrier of water treatment.

For reasonable conditions, the Public Health Service recommends that coliform levels be not in excess of 5,000 per 100 milliliters, and that not more than 5 percent of samples taken exceed 20,000 coliform bacteria per 100 milliliters.

The graphs indicate that pollution has greatly exceeded these tolerance limits at both the Omaha and St. Joseph water supply intakes. Bacteriological pollution was usually most critical during the summer period. Degradation of water quality was considerably more marked at St. Joseph than at Omaha, as would be expected from the pollutional load contributed at Omaha. Average monthly values reached 250,000 coliforms

per 100 milliliters at Omaha and 380,000 coliforms per 100 milliliters at St. Joseph during 1955. The maximum coliform values ranged much higher than the average monthly values.

The third chart indicates the percent of samples with coliforms consistently exceeding acceptable values. It should again be noted that acceptable levels of coliform density are measured in two ways: (a) not to exceed a density of 5,000 per 100 milliliters, and (b) not more than 5 percent of sample should exceed densities of 20,000 per 100 milliliters or over. The chart shows that at St. Joseph densities of 5,000 were exceeded in over 80 percent of the samples, densities of 10,000 in 75 percent of the samples, densities of 20,000 in over 60 percent of the samples.

The chart also illustrates the increase in the coliform level starting at Omaha and working down to St. Joseph and Kansas City, Kansas.

The final chart indicates that pollutional conditions as represented by coliform-type bacteria are much more intense at intermediate points than they are at the water plant intakes specifically. That would be expected since the water plants represent the greatest distance between the upstream source of pollution and the water plant use. Specifically below Omaha the bacterial pollution reaches many, many times the level that it exists at the downstream water plant.

While this fact suggests that water plants have the

most favorable locations under the circumstances, it also points out that pollutional damages to uses other than water supply may be considerably greater than can be measured by treatment problems posed at various municipal water plants.

As a result of the investigations and studies made over the several years, and in the light of complaints, information and other data in the files of the Public Health Service, it is evident that pollution of the Lower Missouri River exists below Omaha. It is further evident that this pollution is of an interstate character. Finally, it is apparent that the effects of this pollution are detrimental to the reasonable use of waters in the Missouri River for municipal and industrial water supply, commercial and sport fishing, boating, and other recreational pursuits. Public opinion is more alert than ever before to the dangers and ill effects of water pollution, and there is every indication that the citizens of each concerned community and the business and industrial leaders of the area are ready to move forward to effectively solve this problem.

This presentation should recognize that considerable progress has been made in the Omaha area. I am sure that later testimony will bring out that voter support has already been secured and that is certainly an important step in any program. Planning has advanced to virtual completion for the 63rd and Harrison plant. It is under way for the Minne Lusa Douglas Street section of the problem. And as the conference chairman

stated, this conference will record and reflect this progress.

Thank you.

CHAIRMAN STEIN: Thank you, Mr. Hopkins.

Miss Hough, will you mark this statement Exhibit FC-1.

Do any of the conferees have any comments on Mr. Hopkins' statement or have any questions to ask Mr. Hopkins?

If not, I would like to ask Mr. Hopkins just two small questions, largely for the record.

One, as you know, this conference just has jurisdiction over pollution of interstate waters. The term "interstate waters" under the Act means all rivers, lakes, or other waters that flow across, or form a part of, boundaries between two or more states. In your opinion would you say that the Missouri River in the area you have described meets the definition of interstate water under the Federal Act?

MR. HOPKINS: Unquestionably.

CHAIRMAN STEIN: The next question I would like to ask is, the Federal Government also has jurisdiction over pollution of interstate waters which endangers the health or welfare of persons in the state other than that in which the discharge originates. Would you say that the situation you have just described meets these specifications I have outlined here?

MR. HOPKINS: Yes.

CHAIRMAN STEIN: Thank you, Mr. Hopkins.

Next I would like to call on Mr. Filipi to talk to the sources of pollution and the nature of the wastes.

Mr. Filipi.

Before you start, the record may indicate that Mr. Filipi's statement will be Exhibit NC-1.

MR. FILIPI: Mr. Chairman, Mr. Mayor, members of the conference.

The Missouri River is the most important resource in the Middle West. It supplies 250 million gallons of drinking water daily to 15 communities of a total population of 1,750,000 people. Fifteen industries use 1150 million gallons of this water daily for various process work. It removes domestic and industrial wastes from 270 municipalities and at least 75 industries. Commercial fishing and navigations are important uses of the river. Recreational fishing and boating are being not only enjoyed by hundreds of persons at this time, but plans for additional development in this area are being made if the waters are cleaned up.

In the matter of existing pollution, studies made in the past indicate that the Missouri River is highly polluted. The details of these studies are recorded in the Public Health Service Publication No. 269, Lower Missouri River Basin Water Pollution Investigation, October, 1952. No one has ever questioned the data therein or the conclusions reached.

These studies indicate that the quality of water in

the river is far below that desired for the various uses. The only reason that it is now used is because there is no other supply available. In the case of Nebraska City another source of water was recently developed in order to get away from drinking the highly polluted river water. When the citizens of Nebraska City learned of the quality of water used as a supply, when they saw the debris on the water plant intake screens, and saw the scum on the settling tanks, prompt action was taken to develop a new water supply.

The bacterial pollution is far higher than that acceptable for drinking water by the United States Public Health Service. These standards are well accepted by water works and public health officials. Only by the extremely careful operation of water treating plants is the consuming public given reasonable protection from drinking water that could be polluted or contaminated. All known processes and equipment is being used to produce water of acceptable quality. A slight failure on operation, equipment or chemical could easily be the factor in water-borne epidemic.

The fact that the river is badly polluted has long been known. As far back as 1948, in meeting with the Omaha Sanitation Commission, the Chairman stated that they recognize that Omaha is polluting the river, but that the State of Nebraska has no authority to order abatement, and that only when the Congress of the United States so orders will treatment

be provided. All other communities along the river likewise acknowledge pollution and all agree something must be done.

In setting up a program of abating existing pollution and preventing future pollution, it is the belief of municipal officials in Nebraska representing communities discharging sewage that clean-up should start where the greatest pollution exists. This philosophy may be partially accepted because, even though the statement may be true, it gives opportunity for stalling by other pollutors. The State Department of Health never accepted this reasoning. It is our belief that every bit of pollution adds to the over-all problem. Therefore, each town along the river has been urged to plan a sound sewage treating program.

The over-all program has been accelerated by the follow-through of an agreement drafted by the State Sanitary Engineers of Iowa, Kansas, Missouri, and Nebraska and the Drainage Basin Engineer of the United States Public Health Service on September 15, 1953, for abatement of pollution entering the main stem of the Missouri River. This agreement, together with a survey of this meeting, are attached as Exhibit A.

The details of this agreement were carried out by the holding of individual and joint conferences with municipal officials. These meetings served a useful purpose of educating the officials of the problem at hand, but yield no tangible

results. Some engineering studies were made, more meetings were held, several communities adopted a sewer service charge for the financing of treating works, but as yet no treating plants in Nebraska are under construction along the main stem of the Missouri River.

A definite understanding of a construction program must be set up with definite target dates for the letting of contracts for construction. This should include communities in all states bordering the river. Since the larger communities are looked upon as leaders in all civic enterprise, it is only reasonable that since, in addition to population size, they are the largest contributors of pollution that they be the first to set definite target dates for their program. The greatest results in stream pollution abatement will be realized by the construction of the larger plants. This will then remove the excuse that the smaller communities are using of waiting until Sioux City, Omaha, or Council Bluffs start construction.

The passage of Public Law 660 by the 84th Congress now sets up a national program which will envelop regional and state programs, coordinating all work for one common objective. This law now provides the authority that was questioned in 1948, that no one except the Congress can force Omaha to provide treatment. If reasonable progress is not reported, means of enforcement are provided.

On May 21, 1957, the Nebraska Legislative Bill 118 was signed into law by Governor Anderson and provides an overall state water pollution control program for the waters of the state and those bordering the state. This then gives not only Federal but also state authority for pollution abatement.

Conferences and meetings have been held with representatives of all communities regarding this problem. All are cognizant and with the exception of one community all have agreed to the setting up of a program. Engineers are now making studies at Blair, Omaha, and Nebraska City. Preliminary reports have been prepared by the cities of Plattsmouth and Bellevue. Plans for treatment of sewage from at least one outfall are being drawn up by the City of Omaha. Resolutions for completion of studies leading to the construction of plants to treat all sewage discharged by Omaha have been adopted by the Omaha Sanitation Commission. Sewer service charges are being collected by several communities.

It is, therefore, my opinion that the program is well on its way, even though no official orders have been given.

The progress of this program will depend upon initial construction by the larger cities and also the understanding that no partiality will be shown to any community, but that treatment will be required by a certain date by all contributors of pollution. The interstate agreement of September 15, 1953, should be re-affirmed and perhaps revised in light of

current laws to act as a guide in setting up definite target dates. The target dates set up by this conference should be given publicity to advise each community of the over-all program to permit them to set up details of compliance.

In Nebraska there is a complete understanding of the problem. There is now needed only the setting up of a definite over-all program which must specifically be followed.

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Exhibit A

SUMMARY OF CONFERENCE, STATE SANITARY ENGINEERS,
LOWER MISSOURI BASIN WITH THE DRAINAGE BASIN ENGINEER
OMAHA, NEBRASKA

September 15, 1953

The State Sanitary Engineers of Iowa, Kansas, Missouri, Nebraska, and South Dakota, in a meeting of September 15 at Omaha, Nebraska, with the Drainage Basin Engineer, reached agreement with respect to a uniform abatement program for pollution entering the Main Stem of the Missouri River (Randall Dam to the Kansas River, inclusive) as follows:

1. Each State agreed to pursue, within the framework of its State-wide program, a program of pollution abatement directed to secure treatment of sewage and industrial wastes as outlined in the Lower Missouri Report issued cooperatively by the 5 States and the Public Health Service. Guidelines for the program as agreed upon by the 5 State Sanitary

Engineers are attached hereto.

2. The principal objective of treatment is the improvement of raw water quality for domestic use. Removal of settleable and floating solids shall be considered the minimum accepted treatment. In the review of plans and specifications, each State agreed that consideration shall be given to programs of waste salvage, improved housekeeping, fine screening, pretreatment, or other control of plating, packing house and other concentrated industrial wastes as necessary to insure reasonable reduction of toxic materials, oils, acids, alkalies, blood, grease, offal, scraps, paunch manure, and other objectionable matter. Supervision and control of waste reduction programs for industrial wastes entering a municipal system shall be the responsibility of the municipality.

3. As possible the States will undertake collection of additional basic data aimed to permit maximum feasible evaluation of: (a) Existing pollution; (b) reduction in pollution by waste treatment; (c) significance of residual pollution; (d) validity of current bacterial standards relating to raw water, and (e) related factors. Long range programs of coliform MPN analyses will be established at this time as possible at principal water plants, and if feasible, at one location

in the upstream portion of the river reach.

The comprehensive program for control of water pollution in the Missouri Basin, to be adopted by the Surgeon General and now in process of review by State and Federal agencies, proposes to adopt programs as developed by the Missouri Basin States, and shown in sub-basin reports previously issued. The co-operative report for the Lower Missouri Basin recommends primary treatment for the interstate portion of the Missouri River. The States participating will therefore undertake the program as outlined above with the understanding that same conforms to the comprehensive program to be adopted by the Surgeon General as reasonable, adequate, giving due consideration to existing and reasonable anticipated future uses of water in the Missouri River, and otherwise fully meeting the requirements of the Federal Water Pollution Control Act.

While complete agreement was not reached, it was the opinion of the majority of State Sanitary Engineers present that continued use of existing combined sewers should be permitted if provision is made to carry up to three times normal flow through the treatment plant, bypassing to the river flow in excess of that amount. Three times normal flow, as the most generally used factor, was thus considered a reasonable objective for main stem systems.

UNIFORM PROGRAM FOR ABATEMENT OF INTERSTATE POLLUTION IN THE MAIN STEM, LOWER MISSOURI RIVER, AS AGREED TO BY THE STATE SANITARY ENGINEERS OF IOWA, KANSAS, MISSOURI, NEBRASKA AND SOUTH DAKOTA

Within the framework of prevailing program practices and existing program procedures, the State Sanitary Engineers of the 5 States agree to undertake the following program for treatment of sewage and industrial wastes entering the interstate portion of the Lower Missouri River.

Step 1

On or about November 1 each State will submit a report to its respective municipalities and industries:

(A) Advising of the uniform being initiated by each of the 5 States.

(B) Calling attention to heavy bacterial pollution existing at water supply intakes, as reported in the Lower Missouri Report pursuant to cooperative investigation undertaken by the 5 States and the Public Health Service.

(C) Recommend early initiation of a realistic and orderly program of planning, financing, and constructing remedial works.

(D) Requesting prompt fulfillment of such a program.

Step 2

On or about December 1, the Public Health Service will direct a letter to each State Health Officer, making reference to the

Lower Missouri Report and interstate pollution as outlined in State evaluations prepared by the Basin Office in August, 1953, and suggesting appropriate State action to abate interstate pollution.

Step 3

On or about January 1 each State will, at its discretion:

(A) Notify respective municipalities and industries of the Public Health Service letter, and advise of the provisions of Public Law 845 and the resultant reinforcement of State abatement programs, and

(B) Request that the State agency be advised (at intervals to be determined by the States) of progress made in securing abatement.

Step 4

Each State pursue the normal program and administrative procedures prevailing in the State as necessary to keep the movement going, and make appropriate follow-up of Step 3, as meetings with City Council, hearings, etc., as deemed proper and advisable.

Step 5

About January, 1955, the States and the Public Health Service will make appropriate joint review of progress by each locality, with future "progress evaluation" reviews as circumstances justify.

Step 6

At such time as joint State-Federal progress reviews indicate the enforcement program of a State to be unsuccessful (particularly where State Laws or programs appear inadequate to keep up with progress in the remainder of the stream reach), the Public Health Service will initiate enforcement proceedings as provided for in the Federal Water Pollution Control Act in the interest of maintaining a reasonable balance of program throughout the interstate portion of the stream. Federal actions should be closely coordinated with State action and it would be desirable for the States and the Public Health Service to jointly review proposed federal actions prior to their initiation.

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CHAIRMAN STEIN: Thank you.

Are there any comments or questions to Mr. Filipi on this statement?

Mr. Smith?

MR. SMITH: I would like to ask a question. Does Omaha now collect a sewer service charge?

MR. FILIPI: Mayor Rosenblatt?

MAYOR ROSENBLATT: Yes.

CHAIRMAN STEIN: Are there any more questions or comments?

Thank you, Mr. Filipi.

I would like now to call on Mr. Hodgkinson of Kansas to speak to the effects of pollution on present and potential water uses in Kansas.

Mr. Hodgkinson.

Before you start, I would like to have this statement marked as Exhibit KC-1.

Mr. Hodgkinson.

MR. HODGKINSON: Mr. Chairman, the State of Kansas is concerned about the pollution of the Missouri River by municipal and industrial wastes discharged at Omaha, Nebraska. This pollution affects several beneficial water uses, but our chief concern is the protection of the Missouri River as a source of municipal water supply for the cities of Atchison, Leavenworth, and Kansas City, Kansas.

Samples collected from the Atchison raw water intake in 1950 had an average coliform index of 70,000 per 100 milliliters. Of the samples collected from 1954 to this year, 7 percent had a coliform density over 100,000 per millliliter, 15 percent over 50,000, and 36 percent had an index over 20,000. At Kansas City, Kansas, where long-term records are available, the average annual coliform concentration increased from 6,000 to 73,000, or a 12-fold increase in 30 years. A plotting of the coliform concentration of the Kansas City raw water against years shows a very definite, gradual and upward trend over the period of record. This trend is comparable

with municipal and industrial growth along the main stem of the lower Missouri, which would indicate that the coliform index can be expected to continue to increase unless adequate waste treatment is provided.

Obviously the wastes discharged in Omaha are not solely responsible for contamination of the raw water supplies for Atchison, Leavenworth, and Kansas City. However, it is our opinion, based on the report of the water pollution investigation of the Lower Missouri River Basin prepared by the U. S. Public Health Service and six cooperating state agencies, that Omaha is a major source of this contamination and the residual effects of pollution discharged upstream are noticeable at the raw water intakes in Kansas.

According to drinking water standards adopted by the State of Kansas, the U. S. Public Health Service and most of the state agencies, the raw water coliform density should not exceed 20,000 per 100 milliliters when a modern, complete treatment plant is provided. By extensive and efficient use of chlorination it is possible to treat water containing 20,000 coliforms per 100 milliliters. However, chlorination becomes the only line of defense as the coliform density increases. Since chlorination is accomplished by man-made and man-operated machines and is therefore subject to malfunction, the hazard to the health of the public drinking the water becomes much greater as the number of coliform organisms

increases.

Damages to other beneficial water uses have not been as significant as the municipal water supply problem but are worthy of consideration. Sportsmen have complained about the effects of pollution on fish and wildlife. Livestock watering has been impaired at times and the aesthetic values associated with a clean stream and healthful environment have been adversely affected.

The people of Kansas have demonstrated their desire to clean up the streams of the state. Thirty-four sewage treatment plant projects are under construction at the present time, while 36 plants were completed in 1956; an average of 25 projects have been completed each year for the past five years. Atchison and Leavenworth are committed to having a treatment plant under construction by January 1, 1959, on the assumption that adequate treatment facilities will be provided for the larger sources of pollution on the Missouri River. Kansas City, Kansas, has construction under way to provide interceptor sewers and provide for the separation of storm and sanitary flow in preparation for sewage treatment plant construction. Permits issued to Kansas City, Kansas, to discharge untreated sewage to the Missouri River will expire on January 1, 1960.

CHAIRMAN STEIN: Thank you, Mr. Hodgkinson.

Are there any questions or comments of Mr. Hodgkinson?

MR. HOPKINS: Yes, sir.

Mr. Hodgkinson, would you refer to the second page of your statement? You read a coliform level of 200,000. I believe your text is 20,000.

MR. HODGKINSON: I am sorry.

MR. HOPKINS: Will you verify that?

MR. HODGKINSON: 20,000 is correct. Thank you.

CHAIRMAN STEIN: Are there any further questions or comments?

If not, may we hear from Mr. Houser of Iowa on the effects of pollution on present and potential water uses in Iowa.

MR. HOUSER: I have a written statement for the record and then I would like to make a few remarks that I do not have a statement on.

CHAIRMAN STEIN: Before we start, can we mark Mr. Houser's statement as IC-1.

Thank you, Mr. Houser.

MR. HOUSER: The State of Iowa is mainly concerned with three aspects of the pollution of the Missouri River as applied to the City of Omaha, namely, (1) the effects of sewage and wastes discharged from the Minne Lusa outlet above the City of Council Bluffs water supply intake, (2) the effects on the recreational use below all sewer outlets, and (3) the effects on commercial fishing below all sewer outlets.

The water purification process at Council Bluffs involves more than the minimum for river waters, being composed of pre-settling, pre-chlorination, chemical flocculation, clarification by settling, filtration, and post chlorination. In developing a stream pollution control program for the Missouri River, the states in the Basin and the Public Health Service agreed on water quality objectives that include the generally accepted standard that the average monthly coliform index should not exceed 20,000 per 100 milliliters in more than 5 percent of the samples in any one month for raw water supplies subjected to this type of treatment process. Samples of river water taken from the water works intake over a period of several years have shown the coliform index to exceed this amount quite regularly. In fact, the average number of coliform organisms in samples collected during the past two years have been equal to or exceeded this number in all months except one. These samples have also indicated the maximum number of coliform organisms in any one sample to be greater than 110,000 per 100 milliliters.

In making this statement and quoting these figures, we do not infer that the finished water as leaving the purification plant is unsafe as a public water supply. We do feel, however, that the bacterial load on the purification process is more than desirable. We further feel that the sewage from the Omaha sewer outlet above the water works intake contributes

heavily to this load.

In the past, the recreational use of the river has been quite limited. However, with the channel stabilization construction program and maintenance of a higher low flow, the recreational use has increased considerably and conservation interests predict that the increase will be at a much higher rate in the future. People using the stream for such recreation as boating, fishing, water sports, and other similar activities are subjected to some degree of health hazard and with the discharge of untreated sewage into the stream the hazard is increased many fold.

Further remarks on the effects of the existing pollution on the recreational use of the river and on commercial fishing will be presented by Mr. James Harlan, Assistant Director of the Iowa State Conservation Commission.

I think, Mr. Chairman, that I would like to have Mr. Harlan present his remarks now and then if you will give me a moment or two after that I would like to make some other remarks that are not a part of the statement.

CHAIRMAN STEIN: Fine. Thank you.

Mr. Harlan.

MR. HARLAN: Mr. Chairman, Mr. Mayor, Conferees.

With the stabilization of the Missouri River channel and resultant clarification of the water the river is being utilized for recreation far beyond anything envisioned even

five years ago. This holds true only in those portions of the river that are relatively unpolluted.

The Army developments that are making the use of the river possible have or are destroying the major oxbow lakes in the valley that in past times have provided most of the water recreation in Western Iowa. The loss of these lakes makes the value of the river for recreation greater than ever.

River recreation south of Omaha is almost non-existent because of pollution from municipal and industrial sources. With control of this contamination, the Missouri River in the opinion of qualified authorities will become a recreation paradise. Conservation and sportsmen's groups in western Iowa are aware of these values and are greatly concerned about pollution control.

The river below Omaha is very badly polluted. I have been on the bottoms when the stench from the stream could be smelled long distances. I have seen patches of floating grease solid enough for crows to ride on in the current. I have tasted catfish taken from the stream below Omaha that were inedible because of a kerosene-like taste.

I have been advised by our conservation officers who are constantly working along the river and in daily contact with the people there that there is little fishing below Omaha except by people in the lowest income bracket because of the foul condition of the river and the fact that the fish have

a gassy taste. Our officers have also advised that often fish taken commercially are unmarketable because of the taste of gas.

Because of the gassy taste of fish taken from the polluted waters commercial fishing is relatively unimportant. However, stabilization of the river in the opinion of biologists has been of great benefit to fish life and an explosive increase of fish is expected. With effective pollution control commercial fishing on the Missouri River would become an important source of food and revenue.

Our conservation officer in Mills County has advised me that his many hunting, boating and fishing enthusiasts are pinning more and more hope on the river as a place for recreation, that the river work has cleared up much of the silt, but that industrial and domestic pollution has become more and more apparent with raw domestic sewage and industrial wastes, including oil, grease, chemical residue and stockyard wastes, making the stream practically unuseable.

He advises that the river actually smells, that the pollution is visible, that the commercial fishermen's nets are filthy when they are raised and festooned with toilet paper and covered with slime and that the fish have a disagreeable oily taste.

He also advises that he has seen catfish with stomachs full of hog roundworms obtained in sewage from the

packing houses.

I am advised by our officers that fishing is much better and much more common above Omaha and the fish edible. They also note that there is increased interest since stabilization of the river in cottages, boating, fishing, and hunting, and that Omaha pollution is destroying the hopes of these people for clean water recreation.

The State Conservation Commission in its endeavor to increase outdoor recreation opportunities is aware of the recreational possibilities of the river, recognizes the destruction of these potentials by pollution, and is hoping to see prompt action in the abatement of the Omaha pollution nuisance.

CHAIRMAN STEIN: Thank you, Mr. Harlan.

Will you identify Mr. Harlan's statement as IC-2.

Mr. Houser.

MR. HOUSER: Mr. Chairman, I would like to add further that the cities in Iowa that have been mentioned heretofore, Sioux City, Council Bluffs, and Carter Lake, have pledged their support officially to a clean-up program of the Missouri River. At Sioux City the State Department of Health of Iowa conducted an investigation of the pollution of the waters, including the Floyd River and Perry Creek, in addition to information obtained from the five states serving the Missouri River, conducted a hearing. At the conclusion of the hearing

the city officials adopted a resolution requiring the engaging of engineering services, a study of existing sewer systems, a sampling program to determine design data for a sewage treatment plant, and finally a contract award date for January 1, 1959.

Progress reports submitted by the city have indicated that those studies are going forward.

At Council Bluffs in July of 1954 the City Council adopted a resolution which recognized the pollution condition of the Missouri River and recognized that Council Bluffs was contributing to that pollution, and agreed that the city would proceed along with the other cities in constructing sewage treatment facilities. Plans for a sewage treatment plant at Council Bluffs had been previously prepared.

At Carter Lake a resolution adopted in May of 1954 similarly endorsed a program of cooperation by that city in clean-up and stated that the town of Carter Lake would cooperate with the construction of these treatment facilities along with the other cities.

CHAIRMAN STEIN: Thank you, Mr. Houser.

Are there any comments or questions either to Mr. Houser or Mr. Harlan?

If not, I should like to hear now from Mr. Happy of Missouri.

Mr. Happy.

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MR. HAPPY: Mr. Chairman, I should like to ask Mr. Jack Smith of our agency to read the statement of the Missouri Division of Health.

CHAIRMAN STEIN: Thank you, Mr. Happy.

May we mark this statement MC-1.

MR. SMITH: Mr. Chairman, members of the conference, Mayor Rosenblatt.

The Missouri Division of Health as the official water pollution control agency of the State of Missouri is deeply concerned about pollution caused by the discharge of municipal and industrial wastes at Omaha, Nebraska. The Division of Health's primary concern is the protection of the Missouri River as a source of municipal water supply for the cities of St. Joseph and Kansas City. Other water uses which are adversely affected include industrial water supplies, fish and wildlife, and recreation. Samples collected at the Kansas City, Missouri, water intake reveal that the annual average coliform content of the raw water has increased tenfold since 1900. More recent sampling and analyses at the St. Joseph, Missouri, water intake reveal that during the years 1955 and 1956 the average coliform index is above that considered acceptable for raw water supplies by the Public Health Service. Average monthly coliform indices exceeded the maximum recommended limit of 20,000 coliform per milliliter during all months of 1955 and 1956 except the winter months of December

1955 and January 1956. Generally accepted drinking water standards as adopted by the U. S. Public Health Service establish that the raw water coliform density should not exceed 20,000 per milliliter when a complete treatment plant is provided. Raw waters containing coliform densities in excess of this number require secondary and tertiary treatment. The commonly employed treatment methods are mechanical in nature and chlorination constitutes the only line of defense as the coliform density increases. It is obvious that the hazard to the health of the public drinking the water will be increased since the mechanical treatment devices are subject to breakdown and inferior operational practices.

The Missouri Conservation Commission reports that waterfowl are affected by the presence of grease, oil, and other industrial wastes in the reaches of the Missouri River bordering the State of Missouri. While no investigations have been made above the City of St. Joseph into the effect of pollution on fishlife, it is safe to assume that the presence of wastes in sufficient quantity to affect waterfowl could also be shown to have a deleterious effect in the propagation of fish. The presence of floating oil and greases also discourages use of the streams for boating, swimming, and other recreational uses. The Missouri Division of Resources and Development has stated that they hesitate to recommend that industries locate on the Missouri River above Kansas City due

to the difficulty which might be encountered in treating Missouri River water for industrial purposes, and due to the unsatisfactory condition caused by sludge banks and other waste deposits on the shoreline. The people of the State of Missouri have demonstrated a desire to clean up the streams of the State. Those cities discharging wastes to the Missouri River have begun studies and are developing plans to abate pollution sources for which they are responsible. The City of St. Joseph at a similar conference held Tuesday, June 11, suggested the arrangement of financing by January 1, 1958, the completion of detailed plans by June 30, 1958, and the awarding of contracts by January 1, 1959, as a schedule for pollution abatement which they intend to follow. The City of Kansas City, Missouri, has employed engineers for the purpose of preparing a report on sewers, interception, and sewage treatment for the city and adjoining area, and the City of North Kansas City has ordered the preparation of detailed plans and specifications for abatement works.

The future offers bright prospects for economic development of the Missouri River Basin. It is anticipated that the population of those cities bordering the Missouri River will continue to increase and that industrial development in these cities will continue to expand, provided the water quality of the river can be improved and maintained at a sufficiently high level to encourage this economic growth.

The Missouri Division of Health believes that the problem is one which extends to all cities located on the Missouri River and that a uniform and coordinated approach to the abatement of pollution is essential to assure continued economic development of the Basin.

CHAIRMAN STEIN: Thank you, Mr. Smith.

Are there any comments or questions to Mr. Smith? If not, we will proceed to the next part of the agenda dealing with adequacy of measures taken toward abatement and nature of delays.

At this point I should like again to call on Mr. Filipi of Nebraska.

Mr. Filipi, you may wish now to call upon people you have invited to aid in this presentation.

Mr. Filipi.

MR. FILIPI: Mr. Chairman, at this time I would like to call on Mayor Rosenblatt to present the program that is now under consideration by the City of Omaha, or anyone he may choose to select.

MAYOR ROSENBLATT: Thank you.

Mr. Chairman, members of this conference.

The people of Omaha are very much aware of the importance of the problem that confronts the respective states that abut the Missouri River. The Missouri River is one of the great vehicles of the world and must be given that

proper attention. The people of Omaha have done so, have indicated it accurately.

I hope that the states abutting the Missouri River will follow suit in augmenting those plans that are necessary in abating the nuisance from polluting the river.

Several years ago when the Federal and State authorities came to the City of Omaha we pledged our assistance and cooperation. We have kept our word. The people of Omaha today have set up a sewer fee program, those monies to be used for the building of sewage disposal plants as well as improving the sewer system. The City of Omaha has also made possible three million dollars in revenue bonds to finance an immediate augmentation of its present treatment plant, one of the few treatment plants on the Missouri River, that today takes care of well over 100,000 people.

Our plans call for the building onto this present treatment plant, which will be given to you in clear detail by members of our engineering department in a few minutes. We also have in the planning another treatment plant covering the Minne Lusa area that has been referred to.

And I might say to you that the people of Omaha have gone far and are a typical example of a great city building a greater America in bringing forward a plan, a blueprint, if you please, for the future of our community, the Mayor's City-Wide Plan, and in this plan it sets up a program of sanitation,

a plan that will be given to the people of Omaha in the immediate future for further financing other than the sewer fee and the revenue bonds already issued, calling, for example, for 23 million dollars additional for sewage disposal plants and also some 19 million for storm and sanitary sewers.

Let me also remind you and tell you that we have one of the few huge incinerators on the Missouri River, that tends to decrease the discharge of nuisance into the Missouri River. We have a some 400-ton incinerator, costing well over a million dollars, to catch much refuse that used to find its way into the river. So we do have two vehicles in the City of Omaha to abate the nuisances from entering the Missouri River.

We want our good neighbors up and down the Missouri to know that Omaha is not only pledged but dedicated to a program and does have actual proof, and the plans for the immediate future that have been asked for by the state and federal authorities will be given in a few minutes by various people representing our engineering department as well as consulting engineers working with the City of Omaha in this program. And I hope that our good friends to the north of us and to the south of us will begin, too, to give to the planning in the future of the Missouri, Mr. Chairman, what the people of Omaha have already established up to this present moment.

Now I would like to ask, Mr. Chairman, that we be

allowed to present our City Engineer, Mr. Ed Woodbridge, who will call upon various peoples to make proper reports informative to the question as well as the problem that concerns this conference.

CHAIRMAN STEIN: Thank you.

Mr. Woodbridge.

MR. E. W. WOODBRIDGE: At this time I would like to present Mr. Herbert Ulrich, who is directing the billing and collection of the sewer service fees. He will explain that to you.

MR. ULRICH: My name is Herbert Ulrich and I am Sanitation Engineer.

The City of Omaha as far back as 1948, and even prior, began to make a concerted study of the problem, especially as the nature of the problem became more evident to the management of the City and the people themselves. The common bugbear that you always run into in these matters was run into in Omaha and that is the question of financing. Much thought was given to a means by which we could finance the various proposals necessary to solve our ills here, and as far back as 1953, starting about 1952, a committee, a steering committee, in order to determine what the nature of financing should be for Omaha's sewerage improvements, was headed with a joint study on the part of a committee working under the Omaha Improvement Commission and the Sanitation Commission, headed by one A. L.

Turner and Mr. Leigh, Mr. Sawtell and Mr. Snow. These were individuals not on retainer that made this study into the nature of our problem and the possible means of financing.

They made a rather brief or quite a pointed study, but necessarily brief in nature, but it did point the way toward the sewer use fee as being probably the answer, even though every other route was studied. This perhaps was the entering wedge on it and sometime later in 1955, these things having been considered and related to our problem in construction, in 1955 the City did retain the firm of Henningson, Durham & Richardson, Consulting Engineers, to further go into this study of financing and they came out in 1955 with this complete report on the financing problem of the City of Omaha, the various routes by which it might be undertaken, and a direct recommendation as to the use. Again the method under point in this report is the sewerage service charge.

Accordingly, last year I was directed to start setting up the mechanics of sewer service charge collection and in October of last year that was done. The process is still building up, but I am happy to say at this time that our daily receipts of revenues from the sewer service charge have run as high as $5,000 a day, which as the program grows you can see there will be a lot of money come in for either the acquisition of revenue bonds or funds otherwise as may be necessary to improve Omaha's program.

The gross revenue we presume to be in the neighborhood of $850,000 per year. As you can see, when we hit these $5,000 a day marks we are exceeding the rate, as far as that is concerned. We do feel that we have a basic and a solid pattern on which to finance our improvements and I do believe that the city can go forth from here with a solid measure, a solid study on financing to correct these various problems which have been under study.

Thank you.

CHAIRMAN STEIN: Thank you.

Mr. Ulrich, I thought that perhaps we might wait until everyone was finished, but I think if we are going to take up the segments it might be better to ask questions now.

Mr. Smith.

MR. SMITH: What I wanted to ask Mr. Ulrich was, is this sewer service charge based on volume or strength? I am thinking particularly of industries. Do you collect the service charge from industry?

MR. ULRICH: Yes.

MR. SMITH: What is the basis of that charge?

MR. ULRICH: The basis of the sewer service charge in Omaha is a flat rate for domestic, for individual homes, and that is 80 cents a month. Multiple housing takes a different rate. Any house containing more than one actual family or an unrelated group of people, shall we say, known

as multiple housing, it is $1 for the first 500 cubic feet and 25 percent of the remainder of the cost of the water used.

On industry, on industrial water use the sewer service charge is based on $1 for the first 500 cubic feet of water used, plus 15 percent of the remainder of the water cost.

CHAIRMAN STEIN: Mr. Ulrich, would you care to indicate what, in your opinion, the sewer service charges would support in the way of a bond issue, a bond issue of what magnitude?

MR. ULRICH: Sir, we have following speakers who will dwell on that.

CHAIRMAN STEIN: All right.

MR. ULRICH: And since there is immediate interest I would rather refer that to Mr. DeBord.

CHAIRMAN STEIN: All right.

MR. SMITH: One other question. Is this charge made for everybody in the city? Is that made for everybody?

MR. ULRICH: There is no exception given in the ordinance.

CHAIRMAN STEIN: Mr. Hopkins?

MR. ULRICH: There are, however, some mill levy limits in it in some cases. In some cases the fee can not exceed a three-mill levy on the value of the property.

MR. HOPKINS: Mr. Ulrich, this comment or question: Is it not true that should the sewer service charges as now

in effect need adjustment that the City of Omaha can adjust those without further vote of the people?

MR. ULRICH: It is my opinion that the--not a legal opinion, but it is my understanding that the rate on sewer service charge could be adjusted by Council action.

MR. HOPKINS: The election that was held did not limit the charges to the present level?

MR. ULRICH: That would be a legal question, sir. But it is my impression that the Council has full authority to act with the mandate that they received from the people.

CHAIRMAN STEIN: Are there any further questions of Mr. Ulrich?

Thank you, sir.

MR. ULRICH: Yes, sir.

MR. WOODBRIDGE: At this time I would like to present Mr. Charles W. Durham, President of Henningson, Durham & Richardson, Consulting Engineers, who are making studies with reference to this subject for the expansion of the Papillion Creek sewage treatment plant, and Mr. Durham will explain to you what has been done and what is being done now.

At this time I would like to present Mr. Durham.

MR. DURHAM: Gentlemen, I would sort of like to review the over-all problems that face Omaha in connection with the solution of this problem of sewage treatment and disposal.

First of all, we were retained by the city in 1952 to make a study of the city's sewer system and that work took roughly a year and we developed a report, I have it here, which has served as a basis for the development of its internal sewer development program. This report deals only with the sewers in the city. At that time we did not study the construction of interceptor sewers and sewage treatment plants along the river, with the exception that we have made some over-all conclusions, some statements as to what we thought the cost might be at some time in the future that the city actually proceeded with this plan.

Again in 1955, as Mr. Ulrich has stated, we were retained by the city to work out a program of financing the city's program of sewer construction and we recommended a sewer service charge to raise the money, roughly one-half from a sewer service charge and one-half from an increase in the mill levy by general taxation. Our program gave the city two choices: One, they could proceed on the basis of this mill levy plus a revenue bond issue, or at their option they can put the program on a pay-as-you-go basis and build it with increments over a period of years.

Since 1955 the picture has been changed to this extent. The Federal Government has passed Public Law 660 and the program of stopping pollution of interstate streams has been expedited.

Now, I am going to devote my remarks to what the City of Omaha is doing at the present time relative to stopping stream pollution, and I will first take up the Papillion Creek sewage treatment plant.

That plant serves all of the area of the city as shown-- Well, first of all, gentlemen, this is a map of the City of Omaha. It shows certain things pertinent to the question. This (indicating) is the Missouri River. This (indicating) is Carter Lake. This (indicating), all of the white area, drains directly into the Missouri River. All of the colored area of the city (indicating), the present city limits are shown by this heavy line (indicating) coming around here, certain growing areas of the city are shown by this darker colored orange or yellow color (indicating), this (indicating) is area in which future growth to the city will occur.

The Papillion Creek sewage treatment plant is located right where my pencil is right now (indicating) on this black dot called the southwest plant and there is a circle 1 here (indicating) which refers to Project 1 of the schedule which I will present in a few minutes. This plant at the present time is handling sewage from a population equivalent of roughly 60 to 80 thousand people and the city at the present time has sold three million dollars in revenue bonds and has committed itself to a program of enlarging this plant to take care of the future growth and developmer

in this general area. You see, that is a pretty big area. It also adopted the over-all program that eventually this one sewage treatment plant will serve the entire area of West Omaha.

At the present time there are two other plants. There is a small one up here (indicating) for Sanitary District No. 20, that is located up near 90th and Fort Streets, and then there is Sanitary District No. 6 plant located here (indicating) near 84th and Hascall Streets. Eventually these plants will be abandoned and all the sewage from West Omaha will be treated in the Papillion Creek sewage treatment plant.

Now, we have here an artist's conception of this plant after it is enlarged, and the enlargement roughly consists of a duplication of the present units. This is merely a picture, but the important thing is that the city has definitely committed itself to this program. Plans and specifications will be completed on or about September of this year, and we can see no reason why a contract can not be awarded sometime on or about the first of next year.

This plant, Project 1, is different from the two other plants proposed for Omaha because it requires a high degree of treatment, very complete treatment. It discharges into Papillion Creek, which flows some miles down, 10 or 15 miles, before it reaches the river, and the area through which it flows is an important area insofar as the treatment

required.

Now let's focus our attention on the length of the Missouri River (indicating). We have here scheduled for Omaha four projects designated as Project No. 2, which is the North Omaha interceptor sewer, Project 3, which is the North Omaha or Minne Lusa sewage treatment plant, Project 4, which is the South Omaha interceptor sewer, and Project 5, which is the South Omaha sewage treatment plant.

Now, the city has committed itself to this extent for Projects 2 and 3. They have authorized the preliminary studies and preliminary planning of these projects. I would like to also point out, gentlemen, that these projects are--due to the growth of the built-up area problems involved take considerable time for the preliminary studies. Each individual sewer outlet has to be studied separately, tests of the sewage have to be made over periods of time, biochemical oxygen demands, suspended solids; you might say tests have to be made of the sewage to determine the basis for the plant design. All those things require time and this work is now in progress. It is scheduled that a complete engineering report on Projects 2 and 3 will be available and presented to the city on or about September of this year. In other words, that schedule of the preliminary work on Projects 2 and 3 will be forthcoming about the same time as final plans and specifications will be out on Project No. 1.

Now, on Projects 4 and 5 very little work except, you might say, of a pre-preliminary nature has been accomplished, and that is the next step for the city to start the development of Projects 4 and 5 in the preliminary stages.

As you know, Omaha has recently adopted a new city charter and this charter is in effect less than a month. We have a new form of government here. But a significant fact was when the old form of government went out of office one of their recommendations at their final meeting was for the new City Council to consider immediately starting studies on Projects 4 and 5, which is the South Omaha situation.

Now, gentlemen, I would like to present to you this schedule, but before I do I believe I have neglected one other point which I would like to briefly mention. Originally we planned or we at least thought of three plants along the Missouri River, one located up here (indicating) north of Carter Lake in Minne Lusa. We referred to it as the Minne Lusa sewage treatment plant. However, due to the fact that Mr. Houser has evidenced the desire to have no pollution of the Missouri River above the Council Bluffs water intake we have changed our preliminary thinking and developed a plan which we believe will be much better from an over-all standpoint for both cities. This plan is for building an interceptor down here (indicating) to roughly the location indicated here (indicating), which is near the Omaha incinerator, and

having two plants along the Missouri River instead of three.

Gentlemen, I have a program or a schedule of sewer construction for the City of Omaha, and I would like to point out that this schedule is predicated upon the-- It won't be necessary to read the schedule.

(Which said schedule is as follows:)

Item No.	Segment of Over-all Project	Latest Date for Completing			
		Preliminary Plan	Site and/or Right of Way Acq.	Final Plans	Contract Awards
1	Papillion Creek Plant Improvement	Now finished	Now finished	9-1-57	1-1-58
2	North Omaha Interceptor Sewers (Burt-Izzard and above)	7-1-57	1-1-58	7-1-58	1-1-59
3	North Omaha Plant	7-1-57	1-1-58	10-1-58	4-1-59
4	South Omaha Interceptors Sewers (All below Douglas St. Bridge)	4-1-58*	1-1-58	10-1-59	4-1-60
5	South Omaha Plant	10-1-58*	7-1-58	10-1-60	5-1-61

Would require notice to proceed by 5-15-57

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MR. DURHAM: I have no doubt that the question is going to arise couldn't some of these dates be expedited, and there is no question, they could be expedited. The over-all

schedule calls for having all this work under construction roughly in four years. This schedule could be expedited to three years. However, I think in establishing these schedules it is better to be realistic. We always have things come up in municipal government, these programs have to be sold to the people, they have to be explained to the people, studies have to be made, and public acceptance of programs many times takes longer than the actual engineering work. We have found that true to date in our work here in Omaha. And we have established those schedules with that in mind. From a purely technical standpoint or a construction standpoint the schedule could be advanced, possibly expedited by a year, but from a practical standpoint we question the desirability of advancing that schedule. However, I would be very happy or we would be very happy to discuss that with you.

That just about concludes my remarks on the subject. This is a very large program. There are some very complicated engineering and construction problems involved, but the city has recognized this in its over-all plan and recognized the problems of financing. It can be financed, it can be worked out, and I believe from my own impression and experience that there is every indication on the part of the Omaha citizens to do so. I believe that was evidenced by the remarks of our Mayor a few minutes ago.

Thank you.

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CHAIRMAN STEIN: Thank you, Mr. Durham.

Are there any questions or comments of Mr. Durham by the conferees?

Mr. Smith.

MR. SMITH: I would like to ask, Projects 2 and 3, you mentioned that samples were necessary. Do you have some industry in that area?

MR. DURHAM: Some.

MR. SMITH: Some?

MR. DURHAM: The heavy industry is down in Projects 4 and 5. In other words, Projects 2 and 3 will be relatively small in comparison to Projects 4 and 5.

MR. SMITH: What is the population equivalent of the capacity of the North Omaha plant?

MR. DURHAM: Our studies aren't complete on that, but I would say that it would be somewhere in the neighborhood of a hundred fifty to two hundred thousand people.

CHAIRMAN STEIN: Mr. Hopkins.

MR. HOPKINS: Mr. Durham.

MR. DURHAM: Yes, Mr. Hopkins.

MR. HOPKINS: I realize that industrial wastes constitute an important segment of Project No. 5. Has liaison and negotiation with the contributing industries been initiated or is that a part of the more detailed study that you mentioned was waiting authorization?

MR. DURHAM: Mr. DeBord is going to take Projects 4 and 5 up in a little more detail as part of the City's presentation, so I would like to have that question held for him.

MR. HOPKINS: All right.

CHAIRMAN STEIN: Are there any further questions of Mr. Durham?

Mr. Hodgkinson.

MR. HODGKINSON: Are all of these plans in existence and the studies that have been completed based on combined sewage and storm water or is this including a separation program?

MR. DURHAM: On Project 1, the southwest plant, that particular plant is in existence and fundamentally we have in West Omaha separate systems of sewage, sewage systems, separate storms and separate sanitary. However, there is some combined waste in the sanitary system. But in general in West Omaha we have separate systems.

In East Omaha, in the area shown in white (indicating), it is all combined sewers and the city under no circumstances would find it economically feasible to build entirely new sewer systems and separate them in that manner. So in the design of these plants we have to pick a dilution factor and design the plants on the basis of when the combined sewers reach a certain discharge into the effect of run-off,

rain water. These plants will treat that discharge up to that point, then the overage would go on through the river. Those matters have already been discussed with Mr. Houser and the program that we will follow will be consistent in that regard. But during periods of run-off we will have treatment by dilution.

CHAIRMAN STEIN: Mr. Houser.

MR. HOUSER: Perhaps this question can be answered later, Mr. Durham, but I am wondering, in the interceptor sewer will there be any industries that will provide their own treatment or will they all be picked up by the interceptor sewers to go to the plant?

MR. DURHAM: Well, at the present time I know of no industries that would be required to provide their own treatment. We would like to avoid that if possible.

CHAIRMAN STEIN: Are there any other further questions of Mr. Durham?

If not, thank you very much, Mr. Durham, for your presentation.

Mr. Woodbridge, do you have something else?

MR. WOODBRIDGE: Yes. I would like at this time to call on Mr. D. P. DeBord, Acting City Engineer. He wants to give you some discussion on Projects 4 and 5.

MR. DE BORD: Perhaps it would be well to describe the formal function of the Sanitation Commission which has been

mentioned several times by previous speakers. That was a Commission legally constituted here in Omaha that had the responsibility of the design, the planning, construction and the maintenance of sewers, of sewerage treatment plants, of general sanitation problems, excluding all of the sanitation problems that are handled by the City and County Health Department. They have gone out of existence as of May 27 and during the meeting of May they recommended to the City Council that provisions be made to retain engineering services to complete the preliminary studies necessary for the design and location of this interceptor (indicating) and this plant (indicating).

During the Mayor's talk he, I believe, mentioned briefly that he was going to implement this new city-wide planning and developing program by getting additional people on his particular staff, citizens throughout the city, to assist in developing the method of financing the balance of the program. So Projects 4 and 5 are not firmed up as of this date financially, and you will see on the bottom of that schedule there is a notation, "Would require notice to proceed by July 15, 1957," which will mean the preliminary planning of Projects 4 and 5. We do hope that that date can be met, planning can be started and the subsequent plans for actual financing completed.

That is about all I have.

CHAIRMAN STEIN: Thank you, Mr. DeBord.

Are there any questions of Mr. DeBord?

MR. SMITH: I would like to ask about this incineration plant. Do you handle all garbage, trash--

MR. DE BORD: We handle all garbage and trash, that is of a combustible nature. We operate sanitary land fills for non-combustibles, that is industrial trade wastes, and incinerator ash.

MR. SMITH: In other words, no garbage or trash into the river?

MR. DE BORD: The only garbage that goes into the river is that that would be used for domestic purposes in the homes or commercial garbage grinders used by some of the food processing plants, which enter the river through the sewer mains in this area here (indicating).

MR. HOPKINS: Mr. DeBord, at the present time what disposition is made of the manure, bedding, and related refuse from the stockyards?

MR. DE BORD: To the best of my knowledge a great deal of that is processed into fertilizer, a certain amount is or formerly was loaded into gondola railroad cars and hauled out of the city and what disposition was made I don't know.

Maybe you know.

MR. ULRICH: Some of it was hauled out of town and

they had a burning dump down south of here at one time. Apparently agricultural sources wouldn't take all of it so they did resort to burning, which we didn't take too kind a view of, but a good deal of it goes into fertilizer. Some, of course, reaches sewers, some is flushed.

MR. DE BORD: Flushed out through the pens, paunch manure and such as that would go into the river.

CHAIRMAN STEIN: Mr. DeBord, I don't know whether you want to answer these questions now or the other men, but can you--your remark on the go-ahead signal of July 15, 1957, I think is significant. Would you say that the sewer service charge you have imposed at the present time is sufficient to meet the financial cost of Projects 4 and 5 if they were obligated for that purpose?

MR. DE BORD: At the present time the three million dollars in revenue bonds is to provide for interim financing, such as the expansion of the Papillion Creek sewage treatment plant, of which one million six hundred thousand dollars is earmarked for that use, plus two hundred fifty thousand dollars of Federal grant that Mr. Filipi promises and we have on application at the present time.

CHAIRMAN STEIN: Maybe I had better make myself clear. You are imposing a sewer service charge now?

MR. DE BORD: Correct.

CHAIRMAN STEIN: Now, that is bringing in a total of

about how much a year?

MR. DE BORD: It is estimated to bring in $800,000.

CHAIRMAN STEIN: $800,000 a year.

MR. DE BORD: Of which a certain amount must be reserved to retire the revenue bonds, I believe in the neighborhood of-- It will vary from $250,000 to $300,000 a year?

MR. ULRICH: Approximately that.

MR. DE BORD: Approximately that figure. Plus the administration charge of operating the sewer service fee collection office and the balance is available for use in expansion of our program. But there are not now bond funds provided to cover the entire expansion program, which must be developed by the Mayor and his special committee and the City Council.

CHAIRMAN STEIN: Here, let me put the question to you this way. According to the information in some of the preliminary reports I have seen, the present sewer service charge--and I am putting this as a question; I don't know--may support a total bond issue of approximately twelve million dollars. Now, if that is so, what I am getting at, will that be sufficient to support this entirely new program or will you have to come up with additional methods of financing?

MR. DE BORD: Well, let me kind of evade that a little bit in this way.

CHAIRMAN STEIN: Yes

MR. DE BORD: The total needs for this entire program

have not been fully determined because engineering cost analyses have not been made of the total--the facilities we are talking about here in relationship to the interceptors and plants. The amount of money that sewer service fees can support in bonds would have to be determined by a bond consultant. I am not qualified to speak on that. Maybe some of these other men can give you more information.

MR. DURHAM: I wonder if I may make a few remarks here?

CHAIRMAN STEIN: Yes, go ahead.

MR. DURHAM: I think the thinking all along has not been to finance this entire program with sewer revenue bonds.

CHAIRMAN STEIN: Yes.

MR. DURHAM: It is so we could get a more equitable distribution by a balance of general obligation bonds and sewer revenue bonds, and that has been our endeavor all along.

CHAIRMAN STEIN: Yes. Well, now, Mr. Durham, may I ask, what type of go-ahead signal would be forthcoming on July 15, 1957, that was alluded to? Is that a go-ahead signal to continue or to prepare preliminary plans?

MR. DURHAM: Well, you see, the work that is in progress now on Projects 2 and 3 is a preliminary engineer report and estimate of cost and program to actually get that project under way.

Now, on Projects 4 and 5 it would take roughly, oh, eight months to a year to do that preliminary work. So obviously if we are to complete that work in any given schedule, say in the next calendar year, the authorization to make that engineering study would have to be forthcoming from the Department of Public Works and the City Council sometime within the next month or so in order to make that possible. Do you see what I mean? In other words, that is the preliminary studies and preliminary work.

CHAIRMAN STEIN: Let's see if I can recapitulate this and correct me if I am wrong.

As far as the Papillion Creek plant is concerned, the revenue bonds have been authorized and the financing is in sight.

MR. DURHAM: That is correct.

CHAIRMAN STEIN: As far as the North Omaha interceptor is concerned and what you have referred to as your Project 3, your Minne Lusa area plant, the preliminary plans are well under way to completion; however, they--

MR. DURHAM: Let me correct that. The preliminary engineering studies.

CHAIRMAN STEIN: --studies are under way to completion, but there has been no commitment for financing those plants from City resources, although considering the $800,000 sewer service charge coming in there is a chance that that

might be in sight if the City so wishes?

MR. DURHAM: That is correct.

CHAIRMAN STEIN: O.K. Now--

MR. DURHAM: In other words, on Projects 2 and 3 the preliminary engineering studies are in. The detailed financing can't be worked out because we don't know how much it is going to cost yet.

CHAIRMAN STEIN: Now, as I understand it, for even the tentative schedule you have set up to be met, the city would have to authorize preliminary studies on Projects 4 and 5 by July 15 of this year, is that correct?

MR. DURHAM: Well, approximately, yes.

CHAIRMAN STEIN: Approximately. Now, even if that were done, however, there would have to be an adjustment on financing in the sense that the city necessarily would want to re-evaluate the financing and possibly want to go beyond this $800,000 a year fund or go to another fund before they made financial commitments on the 4 and 5 projects, is that correct?

MR. DURHAM: Yes, I think they will want to re-evaluate their financing program at each one of these steps. After they consider Step 2 it will be re-evaluated, Steps 3, 4 and 5. If the preliminary engineering was all done on all these projects it would be possible to work out a blueprint and stick to it, but we are not quite to that stage yet except

on this Project 1. We are almost to it on Projects 2 and 3.

CHAIRMAN STEIN: All right, thank you.

Are there any further questions?

Mr. Woodbridge, would you want to continue?

MR. WOODBRIDGE: I think that is all we have.

CHAIRMAN STEIN: Thank you very much, Mr. Woodbridge.

MAYOR ROSENBLATT: I might add, Mr. Chairman, that that the schedule/has been given you of production, if there is any question that our date lines are not satisfactory in collaboration with other abutting municipalities up and down the Missouri, we can re-calculate and maybe set some of them a little bit sooner. But we would like to keep the same tempo in our production as others will keep in their production up and down the Missouri River.

In other words, let me point out one important thing. If we spend, say, some twenty million dollars and get our jobs done by 1960 in Omaha, Nebraska, we don't want to find ourselves where the Mayor of the City of Omaha and my Council has to start standing a barrage and bombardment of questions from our taxpayers in the City of Omaha, what is happening to the north of us and to the south of us? In other words, Omaha is not the only place on the Missouri. There are many other focal points as well as people using the Missouri just like some people in Omaha do. So we want you to know that we want to work with you and we will go right down the line with all

the respective municipalities up and down the river, but we are going to get this job done. As the schedule calls for it, it talks about South Omaha May 1, 1961. We could maybe move this up to May 1, 1960. I haven't discussed this particular question with our engineers or our consulting engineers, but we want it clear that we are willing to adjust and readjust. Omaha has declared itself and has dedicated itself, and just pinpointing Omaha alone on this, I feel it should be a pinpointing of everybody up and down the Missouri River. Because as I pointed out a few minutes ago, we have a potential in the next years of serving 200,000 people with our treatment plant instead of that nuisance going into the river, and we have this some 400-ton incinerator that is going to even be built bigger, it is going to be built to a 500-ton unit in the next year or two. So we want you to know that we are cooperating and want to continue to cooperate only in the best of collaboration with all of you people up and down the river.

MR. HOUSER: Mr. Chairman, may I ask one more question?

CHAIRMAN STEIN: Yes.

MR. HOUSER: To get back on this financing, do the Nebraska statutes require a referendum on a bond issue for a sewage treatment plant?

MAYOR ROSENBLATT: In the City of Omaha under our

new charter, sir, any additional monies to be exercised in the form of general obligation bonds or revenue bonds must be approved by the people. Now, for example, this plan as I just talked about briefly under sanitation, we are asking for some 23 million dollars. Now, I just met with our engineering staff and have instructed them to begin to implement the financing that is going to be necessary over and above what we have already set up, which is the sewer fee and the three million dollars. I have every confidence that the people of Omaha, when they submit this in the fall of the year, in all probability, that they will assume this obligation and make possible the financing for the over-all program up until 1960. In other words, we have partially got our job done as far as financing, but the major part of it will be forthcoming at the end of the year and I have every confidence that the people will bend to it.

CHAIRMAN STEIN: Thank you. That really answers the question.

MR. SMITH: That election is proposed for the fall of this year?

MAYOR ROSENBLATT: That is right, sometime this fall.

CHAIRMAN STEIN: Mr. Hodgkinson.

MR. HODGKINSON: Do you have enough financial resources available at this time to pay for all engineering clear through final plans and specifications for all projects?

MAYOR ROSENBLATT: No. I pointed out that we just issued three million dollars in revenue bonds. We just set up a sewer fee financing program that is bringing in--how much money a year is that?--$800,000 a year. And those two financial incomes will begin to pay the 63rd and Harrison project and pay for the Minne Lusa North Omaha project. That is the two.

MR. HOPKINS: By engineer, Mr. Mayor, you meant only the plans and not the construction?

MAYOR ROSENBLATT: Mr. Durham, would you answer that question?

MR. DURHAM: I believe that in answer to your question, through the sewer service charge that the engineering studies could be financed at the present time because they are a relatively small part of the over-all cost.

Is that correct, Mr. DeBord?

MR. DE BORD: Yes.

CHAIRMAN STEIN: To summarize, and I think maybe we could have saved some time if you had been here before, but I think we can recapitulate in this way, that for the Omaha job to be done in the way Mayor Rosenblatt envisions it, the issue of financing will have to be put up to the people again in an election probably this fall before the money is in sight and they have made determinations on the financing. And I think that that is the essential fact, perhaps, that we

should consider in this.

Now, I would like if we could in the light of the Mayor's comments for the conferees to talk in terms of these proposed dates which were set up, and I think we have to consider several things. Consider the interstate nature of the stream, the activities of your own communities, and of course we must consider the interests of the Federal Government in an even-handed administration and equitable solution of the problem where cities and all states are treated about equally.

Does anyone want to start talking as to that from among the conferees?

If not, I think I will have to call on Mr. Hopkins.

MR. HOPKINS: In view of Mayor Rosenblatt's remarks, I think that it might be well to suggest the basis of understanding among the conferees, that it is his contention as a part of this schedule through submitting another financing issue to the public this fall that he visualizes as an item of the schedule that the remaining finances will be arranged at least by the first of the year.

MAYOR ROSENBLATT: That is right. Now, let me just add to that, Mr. Hopkins.

I think we have fulfilled the requests of date lines that have been outlined in the past year. Omaha has already fulfilled that.

MR. HOPKINS: The only question would be, I think,

on Projects 4 and 5, the date lines that are established in the typewritten sheet are somewhat behind the over-all objective that was set for the river of contracts to be awarded by January '59.

MAYOR ROSENBLATT: In other words, 3 and 4?

MR. HOPKINS: Yes.

MAYOR ROSENBLATT: In other words, contracts to be awarded by the 15th?

MR. HOPKINS: Yes.

MAYOR ROSENBLATT: Why, sure. As a matter of fact, we are right on schedule, then, because we have processed 1 and 2, and 3 and 4 will be completed just as soon as our financing is arranged by way of vote of the people. In other words, this is 1957.

MR. HOPKINS: As a second point to a basis of understanding, I believe the Mayor's remarks will serve for the record that every effort will be made to move the contract award schedules for Projects 4 and 5 ahead at least to 1960 and if possible to 1959.

MAYOR ROSENBLATT: If it is possible. In other words, we have got a program here that calls for a hundred million dollars in the City of Omaha. We are asking our people to approve this program over the next 10, approximately, maybe 15, years and there is probably about thirty million in this Federal and State matching funds. What we are trying

to do is prorate the financing as well as building of this profile within the present monies that the people are appropriating as far as the bond redemption program is concerned. We have a five million bond redemption program that we use in the payment of capital programs and instead of trying to increase these taxes we are trying to maintain the same level and that is the reason why I say I don't know just exactly how the over-all plan will shape up. But I have every confidence that we can meet those date lines that you have set out for us, Mr. Hopkins.

MR. HOPKINS: With that understanding, I would like to have the schedule with those two points reconsidered evaluated by the other states.

Mr. Happy, would you care to lead off on that?

MR. HAPPY: Speaking for Missouri, as you know, earlier this week we had a conference at St. Joseph. As a result of that conference it was brought out that the garbage that has in the past been discharged directly into the Missouri River is now discontinued and will not be resumed. Certain bedding, paunch manure and similar matter that has in the past been discharged into the Missouri River has been discontinued and will not be resumed. The City of St. Joseph has agreed on the following dates:

By September 1 of 1957 there will be a decision made with the industries in the St. Joseph area that are

actually outside of the city limits as to whether or not they will join with the city in providing sewerage and treatment or whether they will go their individual ways. But in either event, these dates will be binding either collectively or individually. The City of St. Joseph will schedule a bond issue election on November 12, 1957, for the purpose of financing their works. Their consulting engineer has indicated that their completed detailed plans can be available by June 30, 1958, and that they will then be in a position to award contracts and start construction by January 1, 1959.

The Mayor even went further. He projected the completion of their works by mid-1960.

Now, it is our contention in representing the Division of Health of Missouri that the awarding of contracts for construction apply to all of the cities in Missouri as of January 1, 1959. And naturally we believe, as Mayor Rosenblatt brought out, there is this necessity for agreement and coordination with the other states in the Basin and that the other states should not fall behind.

I believe that completes my statement, Mr. Chairman.

CHAIRMAN STEIN: Do any of the other states wish to make a statement on these dates?

Mr. Hodgkinson?

MR. HODGKINSON: As I indicated in my preliminary statement, Leavenworth and Atchison are operating on the basis

of a January 1, 1959, deadline for construction. Their interceptor problem will not be nearly as complicated, of course, as Omaha's, but interceptor construction contracts have been let in Kansas City for a project which would be similar to this Project 2 and final plans and specs are on the board for other projects. So that I see no reason why the cities in Kansas should not meet the agreed deadline set by the other states.

CHAIRMAN STEIN: Mr. Houser, do you care to comment on this? I would like to recall one thing before you comment, if I am correct. You said that Sioux City would award their contract by what date?

MR. HOUSER: January 1, 1959. That was a four-year program.

CHAIRMAN STEIN: Yes.

MR. HOUSER: Set up in 1955, and January 1 was the contract award date.

CHAIRMAN STEIN: Yes.

MR. HAPPY: Mr. Chairman.

CHAIRMAN STEIN: Yes.

MR. HAPPY: I would like to bring out further that there apparently is agreement on that date of January 1, '59, for awarding of contracts, but I should like to emphasize my concern, and particularly with regard to St. Joseph, where their financing will be subject to an election on November 12

of this year, that we abide to the greatest possible extent by agreement on that date. In other words, I think you can readily understand that the prospects of the citizens supporting that would be hurt if there was some knowledge of a delay in other locations.

I think we can accomplish that by proper agreement.

MR. HOPKINS: At the base of that agreement, with Mayor Rosenblatt's statement moving this 4 and 5 contract award date to January 1960 and make every effort to have it done in 1959, would that be reasonable consistency with the program in Missouri?

MR. HAPPY: Keeping in mind that two of the three plants would be ahead or identical with the schedules proposed in Missouri. And a one-year lag at the greatest.

MR. SMITH: Would Omaha object to a statement that they would proceed as soon after 1959 as practical on 4 and 5?

MAYOR ROSENBLATT: Is that feasible?

MR. DURHAM: Well, I think in my own opinion it would be possible to telescope this program about a year in Omaha, that is from start to finish. Instead of a four-year program get it down to a three. But when we start talking about January 1, 1959, I mean we are just not talking realistically. Now, I wish we were, but whereas some of this work is under contract in Kansas City, we are merely starting preliminary studies or are in the process of preliminary

studies and this is a tough problem along the river. I wish we could promise '59, but I believe a realistic approach would be about one more year--or one less year than we have in this program.

Does that answer your question?

CHAIRMAN STEIN: First let me ask, are there any questions of Mr. Durham on his remarks?

If not, Mr. Happy would like to speak off the record.

(Discussion off the record.)

CHAIRMAN STEIN: Back on the record.

MR. HOPKINS: I would like to suggest that the contract award schedule as handed in by the city's representative be changed as follows: Project 3 be changed from 4-1-59 to 1-1-59; that Project 5 be changed to 1-1-60, with wording along the line of Mr. Happy's statement.

CHAIRMAN STEIN: All right.

This is just a technical question that I am asking you engineers. If we change the contract award dates, I don't think we have to adopt the first two lines necessarily of this proposal dealing with completion of preliminary plans or acquisition of sites and rights of way, but I would suggest that it might be in order to re-adjust the third column, completion of final plans. Would you care to do that, if that is in order, Mr. Hopkins?

MR. HOPKINS: Well, that would have to precede by

at least three months the contract award date and that is about the schedule that is followed, for instance, on 1 and 3.

CHAIRMAN STEIN: Can we have specific proposals on each of these items? For example, on No. 3 when would you say the final plan should be completed?

MR. HOPKINS: I would say if we moved it back one month that would be--

CHAIRMAN STEIN: September?

MR. HOPKINS: Yes, make it September.

CHAIRMAN STEIN: All right. Now, the others, 4 and 5?

MR. HOPKINS: Move them back to September '59, again wording to be consistent with the suggestion of Mr. Happy.

MAYOR ROSENBLATT: Mr. Chairman.

CHAIRMAN STEIN: Yes.

MAYOR ROSENBLATT: This suggestion revolves and involves itself around a discussion of actually what we are talking about, which is target dates. Also, too, we have got to give consideration to financing. In other words, the two are going to have to go hand in hand, we hope, because we have got a selling job to do here already over and above what we have already accomplished, and in my opinion we are talking about something that is still an unknown quantity when you talk about the vote of the people. We still have to get these bonds approved by our people. I have confidence that we will,

because I think the reason and cause and necessity is just that important. But these are target dates. We are not worried about them if we get our financing, Mr. Hopkins.

MR. HOPKINS: O.K.

MAYOR ROSENBLATT: And they can adjust themselves.

CHAIRMAN STEIN: Mr. Mayor, I think this is the problem faced by every city. It is not unique. I think what we are talking about here is just one segment. Obviously another part of the recommendation that the conferees have to come up with is the financing and obviously what anyone does is contingent on that financing.

In St. Joseph one of the recommendations and conclusions of the conferees was that the question of the financing would be put before the people at this November's election.

MAYOR ROSENBLATT: Well, we are going to try and I hope be able to present our over-all plan to the people some time in October. After all, I am just one part of the vehicle in the management of this municipality and that will be my recommendation, but that remains to be seen whether it is fulfilled. I am anxious to get this show on the road in collaboration with all of you and we are going to try to get it to the people or approved by the people by sometime late this fall.

MR. HOPKINS: The date of January 1, 1958, would be--

MAYOR ROSENBLATT: That is right. Now, when I am

talking about that I am talking about 3, 4, and 5.

MR. HOPKINS: Yes.

MAYOR ROSENBLATT: 1 and 2 are already in the state of manufacture, so to speak.

CHAIRMAN STEIN: In other words, you are talking in terms of financial arrangements being made by January 1, 1958?

MAYOR ROSENBLATT: We are going to try. That is our target date, Mr. Stein.

CHAIRMAN STEIN: That is correct.

MR. FILIPI: Off the record, please?

CHAIRMAN STEIN: Yes.

(Discussion off the record.)

MR. HOPKINS: Mr. Houser would like to say something.

MR. HOUSER: Mr. Chairman.

CHAIRMAN STEIN: We will go back on the record.

Mr. Houser.

MR. HOUSER: I would like to say, and I think pertinent to the subject here, that we appreciate the efforts and commend the City of Omaha and the consulting engineers, particularly on this job of eliminating the Minne Lusa outlet, as we feel that it will be additional protection to the Council Bluffs water supply.

Thank you.

MAYOR ROSENBLATT: Gentlemen, I would like to be excused. It has been a real privilege and pleasure to meet

and work with you. I have got another meeting that they are waiting on me right now and I must go. I just want you to know that we meant just exactly what we said, we want to work with you and for you.

Thank you.

CHAIRMAN STEIN: Thank you very much.

MR. FILIPI: Thank you very much. Thanks very much.

CHAIRMAN STEIN: In line with what Mr. Filipi said, I think we probably have a firmed-up proposal, at least, we can make to the conferees here, but do you want to also consider making recommendations of the conferees relating to Bellevue, Plattsmouth, and Nebraska City in terms perhaps of preliminary plans and a contract award date for remedial treatment works and possibly Council Bluffs?

MR. HOPKINS: Mr. Chairman, I think that this conference was called with specific reference to Omaha as the principal source of pollution in this region of the river, as was an earlier conference at Beatrice. I think that the action taken at Beatrice might set precedent here, whereby the conferees agreed that the respective state health departments shall proceed with their plan which recognizes that all sources of pollution should bring about progress within a reasonable time, that the other state health departments be-- it is understood that the other state health departments will

proceed with the additional sources of pollution as rapidly and expeditiously as possible, and inform the conferees by appropriate progress reports. That would follow.

CHAIRMAN STEIN: Would that be, Mr. Hopkins, six months?

MR. HOPKINS: Six months.

CHAIRMAN STEIN: When would you suggest the first one?

MR. HOPKINS: So near on to July 1st, that I would say that January 1 would be appropriate.

CHAIRMAN STEIN: All right.

If there are any other comments we may entertain them now or else possibly we can attempt to summarize the conclusions and recommendations of the conferees. Are there any other comments by the conferees?

MR. SMITH: One. I wonder what Omaha's position would be in keeping with-- I know they already do not put garbage and paunch manure and bedding into the river, but there is some, as I understand it, going in.

CHAIRMAN STEIN: Yes.

MR. SMITH: Would they be agreeable to requesting that that be stopped in the immediate future, in keeping with St. Joseph's action?

MR. ULRICH: I refer the matter to Mr. DeBord.

MR. DE BORD: I prefer that the City Council, with

some aid from a consulting firm and the engineering section of the City of Omaha, might contact the stockyards company and suggest that they make immediate studies for the removal of excessive paunch manure, and possibly all of it, from the South Omaha stockyards sewer, also some of the outlying plants that also contribute as well as the stockyards company.

MR. HOPKINS: In this case all industries which contribute to the South Omaha sewer are within the corporate limits of Omaha, is that right?

MR. DE BORD: Yes.

MR. SMITH: We would very much like to see that done in keeping with the progress made in St. Joseph.

CHAIRMAN STEIN: I don't know, again I am just trying to sharpen up the proposal. Do you want to make a proposal in line with the St. Joseph proposal? The recommendation of the conferees would be that the discharge of paunch manure, stockyard manure and bedding wastes be discharged within a certain finite period of time and that be very short.

MR. SMITH: Be discontinued.

CHAIRMAN STEIN: Discontinued. Or, as I understood this proposal, it was just a proposal for someone in the city to contact these people for studies to be made. I want to bring you both together so we can entertain a proposal we can get down on paper. Now, what is your suggestion, that the

conferees make the recommendation that this be discontinued? Now, what would you consider the time on that? Thirty days, sixty days, immediately?

MR. SMITH: Well, it seems to me like 60 days. I don't know anything about the volume or problem you have got here, but would 60 days be reasonable?

MR. DE BORD: I think that falls right in line with this study that is being projected for the Projects 4 and 5, because they must contact a larger industry down there that contribute industrial wastes to this pollution problem.

CHAIRMAN STEIN: Mr. Filipi, what would you consider a reasonable time on discontinuance, if you think discontinuance is reasonable?

MR. FILIPI: I think this discontinuance can not be set up at this time, but it should be a part of the engineering study of Item No. 4 and I think that we should ask the engineer, if authorized to go ahead with this by the city, how soon they would be in position to contact these industries.

MR. HOPKINS: Before that question is answered I would like to interject another thought. Actually is this type of work, determining a new method for disposal of these wastes, a proper function of the consulting engineer or the industries themselves? I think it would fall more logically a responsibility of the industry than the consulting engineer.

Do you agree with that, Mr. Filipi?

MR. FILIPI: Yes. But the only point is this, that I think the industry will have to first of all make a study of the source of this pollition and then, secondly, to work out a means of disposing of it.

MR. DURHAM: This is a tremendous problem we have here. We have got the biggest stockyards in the world and they have been studying the disposal of paunch manure for years. I mean they are cognizant of the problem. I don't think on a lot of this stuff we can have anything in 60 days or 90 days. We are trying to set up a schedule here to get the job done in the next three to four years and these studies will start and recommendations, probably something will be done when these engineering studies start. I mean when you live here and know the people involved, know the problems and magnitudes of them, why, there are just no black and white 60-day solutions to this stuff. It takes time and it takes a lot of work, a lot of missionary work.

MR. HOPKINS: I don't think that Mr. Durham intended to infer that it would take the stockyards and related industries as long as three years to work out a plan for salvage and appropriate disposal of paunch manure. Certainly that could be done in a much lesser time than the city can design its facilities, finance it and award a contract for it. I think that he did want to stress that it couldn't be done

overnight, that it would take some considerable study by the industry and probably some facilities for disposal.

I wonder if it would be consistent with the thinking of the conferees that concurrent with this program the city request the industries to proceed as expeditiously as possible to remove those segments of their waste that are not appropriate for treatment within a disposal plant of the type under consideration.

Would that be agreeable to you, Mr. Smith?

MR. SMITH: I think so. It is about 60 days that they accomplished that in St. Joseph, I mean the matter of taking out the bedding. They had to work out a plan, which they advised us that they had. I think somebody mentioned that part of it was going into fertilizer at the present time. And that is what they propose to do in St. Joseph.

CHAIRMAN STEIN: Mr. Smith, may I make a suggestion? I think that these points are well taken. I think the basic point here, and I think it is a very big problem, is to indicate some dates for Omaha. Now, we have several subsidiary points here and I think perhaps the point of the discharge perhaps from Bellevue, Plattsmouth, Nebraska City and Council Bluffs are as important in a measure as the discharge of paunch manure from the stockyards in Omaha. However, I think it may be appropriate to include those in a progress report to the conferees. Now, that does not take sides and say that

it can't be done in 60 days or it must be done much longer. Presumably the Nebraska Water Pollution Control authority will make a report on January 1, wherein the progress will be publicized and will be available to you and make a note of reasonable progress.

How does that sound to you as an approach to this problem of paunch manure and stockyard manure and bedding wastes and the like?

Well, if that is so, unless there are any other comments, maybe we can attempt to summarize the thoughts of the conferees.

I think we might say that the conferees unanimously made the following recommendations and came to the following conclusions:

1. That below Omaha, Nebraska, the Missouri River forms a state boundary between Nebraska and Iowa, between Nebraska and Missouri, and between Kansas and Missouri. One of the major sources of pollution of this reach of the river is the City of Omaha, Nebraska, from which untreated sewage and industrial wastes are discharged to the Missouri River. Other sources of pollution are Bellevue, Plattsmouth, Nebraska City, Nebraska, and Council Bluffs, Iowa.

This pollution contributes significantly to (1) deterioration of water quality for public water supplies at St. Joseph, Missouri, with associate enhancement of possible

disease transmission, (2) increased concentrations of coliform and other organisms associated with human diseases, which constitute a health hazard to commercial and recreational users, (3) deterioration of water quality so as to interfere with the use for stock watering, (4) deterioration of water quality so as to prevent full use of the commercial fishery, (5) deterioration of water quality to create conditions inimical to a habitat for game fish and wildlife, (6) impairment of water quality for many industrial uses.

As far as the City of Omaha, Nebraska, is concerned the conferees agree that the following would be a reasonable schedule for the construction of remedial works by that city. And this takes into account the excellent progress which has been made by the city in planning and preparatory work and in meeting the problem very effectively.

1. The Papillion Creek plant will be improved as follows: Final plans completed by September 1, 1957, and contracts awarded by January 1, 1958.

2. The North Omaha Interceptor Sewers, Burt-Izzard and above, final plans to be completed by July 1, 1958; contract awards January 1, 1959.

3. The North Omaha Plant, final plans to be completed by September 1, 1958; contract awards to be completed by January 1, 1959.

4. All other pollution control remedial facilities

in Omaha to be completed as soon thereafter as possible. However, the final plans for all the other necessary work, including the South Omaha sewers, interceptor sewers below the Douglas Creek Bridge, and the South Omaha plant shall have the final plans completed not later than September 1, 1959, and contracts for such work shall be awarded not later than January 1, 1960.

And further that financing for all these improvements in Omaha shall be completed by January 1, 1958.

That the water pollution control authority of Nebraska shall make periodic reports at six-month intervals to the other conferees concerning the remedial action taken by Bellevue, Plattsmouth, and Nebraska City and Blair to stop discharging substances to the Missouri River which would interfere with legitimate water uses. In addition the water pollution control authority of Nebraska will include in its report progress being made to stop the discharge of paunch manure, stockyard manure and bedding wastes from the Omaha stockyards district into the Missouri River.

The water pollution control authority of Iowa will make periodic reports at six-month intervals to the other conferees concerning the progress being made by Council Bluffs in providing remedial facilities to abate pollution. The first of these reports to be submitted by both Nebraska and Iowa will be January 1, 1958.

Are there any comments or amendments you wish to make to that?

MR. FILIPI: May I suggest that you include Blair in all parts of this?

CHAIRMAN STEIN: In all parts.

MR. HOUSER: I suggest that the town of Carter Lake be included as far as Iowa is concerned.

CHAIRMAN STEIN: The town of Carter Lake will be included as far as Iowa is concerned in all places.

I think also in these reports that we will have we should have reports from Nebraska on the progress of Omaha as well for the information of the conferees. Is that agreeable? I don't know if that was specifically touched on.

MR. HOPKINS: That was included in the statements, yes.

CHAIRMAN STEIN: All right.

Are there any further questions or comments that anyone would wish to make?

MR. DE BORD: As the Mayor indicated, the preliminary planning for Projects 4 and 5 could be started by July 15. If you will refer to our schedule, we have that note.

CHAIRMAN STEIN: Yes.

MR. DE BORD: And he did say that when he was here.

CHAIRMAN STEIN: Will be started?

MR. DE BORD: Yes.

CHAIRMAN STEIN: Well, that is fine. I think that financing thing was cleared up, too.

MR. DURHAM: I think that that is important, that the preliminary work could be started by that date, because if this schedule on 4 and 5 is to be met on the other end of it, it is going to have to be.

CHAIRMAN STEIN: May we suggest amending the conclusions to include that as a statement, that the city officials of Omaha authorize the institution of preliminary planning on the South Omaha interceptor sewer project and the South Omaha plant by July 15, 1957?

MR. DE BORD: Yes.

CHAIRMAN STEIN: That will be in the summary.

Are there any other points?

MR. HOPKINS: I would like to include in that detailed plans and specifications as soon thereafter as practical.

MR. DURHAM: All right.

MR. HODGKINSON: Would it be an alternate to including this September 1, '58, date and January 1, '60, date for the south side interceptor plant to put in this statement about the report and financing?

CHAIRMAN STEIN: We covered financing all in one package, in one recommendation, that the financing for all these projects be completed by January 1, 1958. That is a

realistic date. The only one the record wouldn't show that would fit would be the Papillion Creek, but financing has already been arranged for that.

MR. HOPKINS: I think that Mr. Hodgkinson's point is that the schedule might stop earlier. These conferences must result in a detailed schedule agreed to by the conferees or the Surgeon General must establish one, and I think we had better do it here than to have him do it.

MR. HODGKINSON: We still have these dates.

CHAIRMAN STEIN: You will have your dates to contend with. We could go off the record again, but I prefer not to at this point unless you wish. Do you want to?

MR. HODGKINSON: I am not going to argue about it.

CHAIRMAN STEIN: All right.

Are there any further questions?

If not, we will call this conference adjourned. I want to thank everyone for coming and thank the city for making the use of this hall available. And thank Miss Hough for her usual excellent work in taking the stenographic report.

Thank you, gentlemen.

- - -

Whereupon, the conference stood adjourned at twelve thirty o'clock p.m.

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CHART 1

POLLUTION CONTROL

ONE PHASE OF MISSOURI BASIN DEVELOPMENT PROGRAM

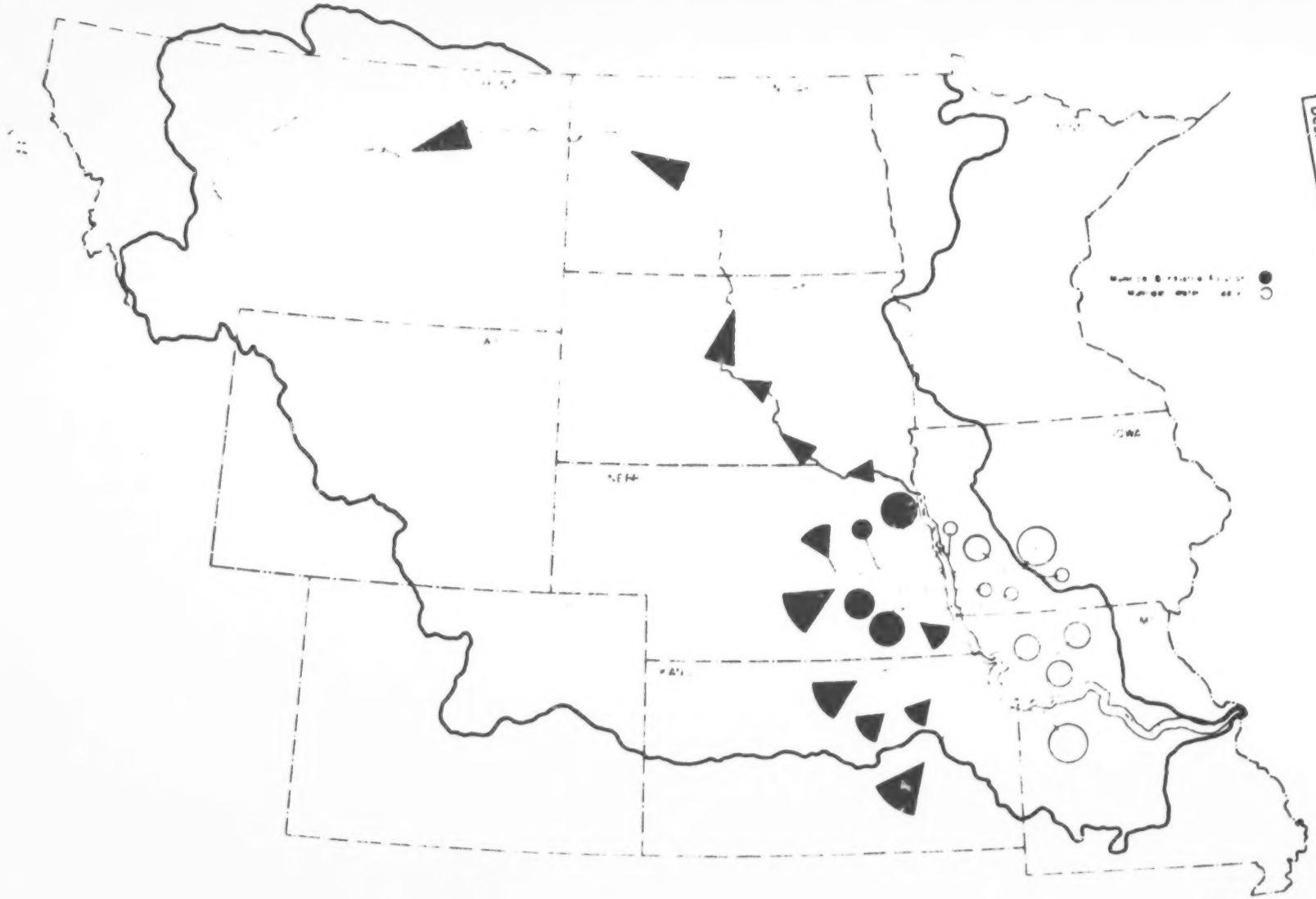

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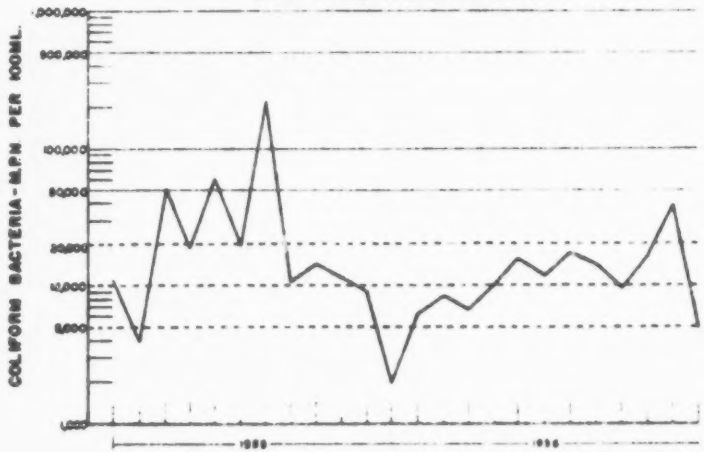
Exhibit FC-1

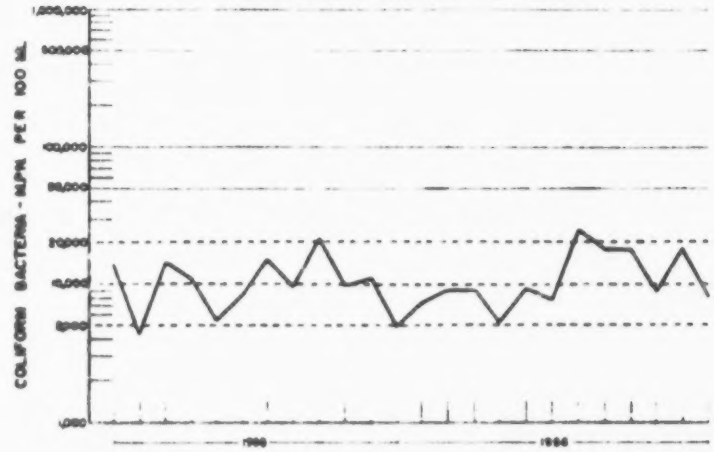
CHART II

BACTERIOLOGICAL POLLUTION CRITICAL DURING SUMMER MONTHS

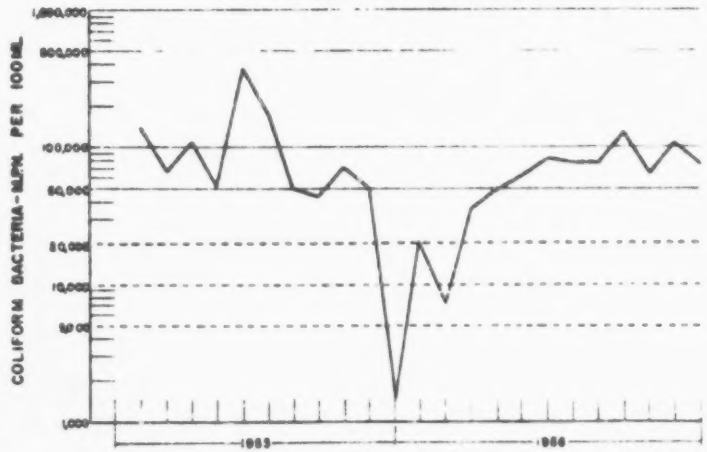
OMAHA, NEBRASKA



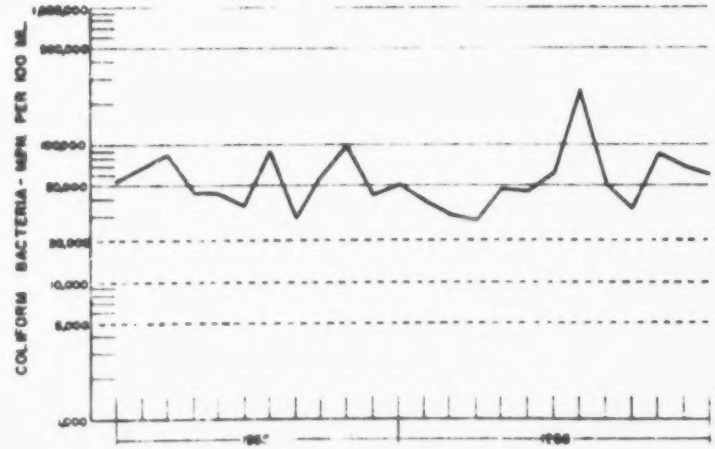
COUNCIL BLUFFS, IOWA



ST. JOSEPH, MISSOURI

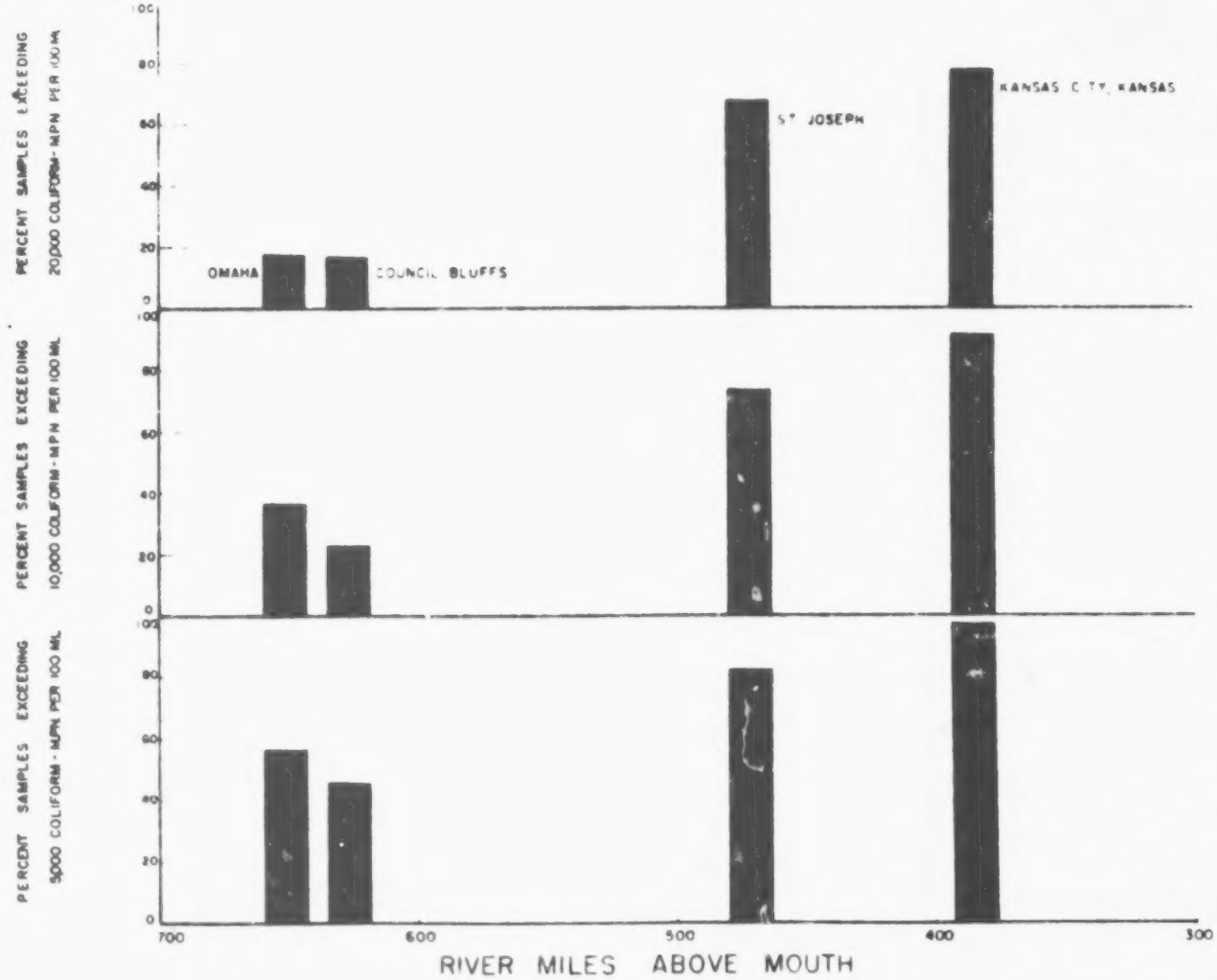


KANSAS CITY, KANSAS



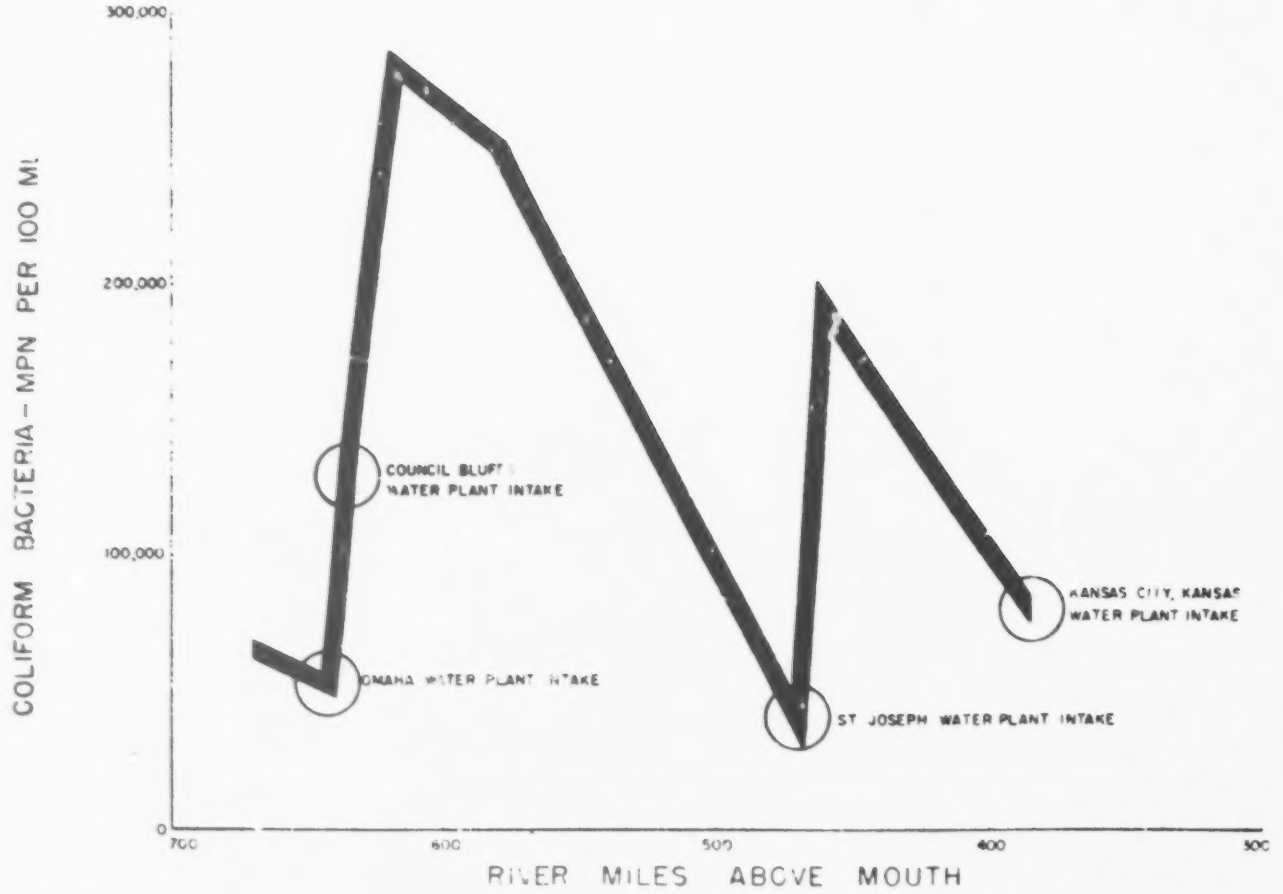
MISSOURI RIVER WATER QUALITY SURVEY
BACTERIOLOGICAL INVESTIGATIONS
AT CITY WATER INTAKES
AVERAGE MONTHLY COLIFORM DENSITIES

A HIGH PERCENT OF SAMPLES CONTAIN COLIFORMS EXCEEDING ACCEPTABLE LEVELS



MISSOURI RIVER WATER QUALITY SURVEY
BACTERIOLOGICAL INVESTIGATIONS
1955 - 1956

POLLUTION LEAST INTENSE AT WATER PLANTS



MISSOURI RIVER WATER QUALITY
BACTERIOLOGICAL INVESTIGATIONS

AVERAGE COLIFORM DENSITIES
JUNE – SEPT. 1950